#### UK TTF conference calls for step change in hardwood marketing

To end years of decline in UK hardwood consumption, a radical step change is required to improve two-way communication between the hardwood trade and key end-user and specifier groups, including product designers, architects, manufacturers, building contractors and retailers.

There is an urgent need, on the one hand, to improve trade understanding of the constraints and opportunities in different market segments, and on the other hand, to encourage market acceptance of a wider range of hardwood species and grades and to improve recognition of their technical and environmental attributes.

These were key messages of the UK Timber Trade Federation (TTF) conference on the UK hardwood market sponsored by The American Hardwood Export Council (AHEC) held on 9 March. The conference aimed to provide a more accurate picture of the hardwood market in the UK and to inform the activities of the TTF which aims to revitalise the market development work of their National Hardwood Division (NHD) in co-operation with AHEC and other producer associations.

TTF Director Dave Hopkins said that the TTF would draw on feedback received at the conference to develop an action plan for hardwood market development and provide the NHD with a budget for implementation.

The conference attracted around 80 participants including representatives of many of the UK's largest hardwood importers and agencies and producer associations such as AHEC, Canada Wood French Timber, Malaysian Timber Council, and the European Sawmillers' Organisation.

A series of presentations and a panel discussion provided insights into the current position of both tropical and temperate hardwoods in the UK and wider European market. It was noted that UK sawn hardwood consumption in 2016 was around 370,000 m3 in both 2015 and 2016, down from 415,000 m3 in 2014 and figures in excess of 525,000 m3 per year prior to the financial crises.

The downward trend in UK consumption forms part of a wider trend across the EU where sawn hardwood consumption has fallen from in excess of 8 million m3 in 2001 to around 5.5 million m3 last year.

## Reasons for declining hardwood consumption in Europe

The downward hardwood consumption trend is partly due to falling availability on the supply side — with hardwood harvesting levels constrained within the EU and a large share of the better quality European logs now being exported to China and other Asian countries, a problem compounded by the very heavy focus on European oak which is also in strong demand in the barrel staves market.

At the same time, Europe's access to tropical wood has diminished, as tropical countries have taken steps to reduce log exports, and a much larger share of logs and sawn wood is now diverted to emerging markets so that European buyers no longer drive price levels and are less able to dictate terms.

Other reasons for downward hardwood consumption highlighted at the conference include: shrinkage of the overall UK and European markets for materials since the financial crises; relative lack of availability to finance and failure to innovate in the hardwood processing sector; and intense competition from a wide variety of wood-panel-based and non-wood alternatives which have experienced large capacity increases and falling prices in recent years.

In the UK itself, domestic sawn hardwood production has remained static at only around 50,000 m3 per year during the last decade. However, due to a significant amount of new planting in recent decades supported by government grants favouring native broadleaves over conifers, availability of hardwood logs for harvest in UK forests is set to continuously increase from the current level of around 400,000 m3 per annum to a high of 3 million m3 over the next 30 years.

Much of the hardwood volume in UK forests is on private land in areas of England with high population density (and greater demand for amenity woodland) and harvesting may well be constrained by environmental and other planning controls. A lot of volume is also likely to be used for power production (use of biomass for energy receives a hefty subsidy in the UK). Nevertheless, there is potential for UK sawn hardwood production to increase significantly in coming decades with important knock-on effects for the import trade.

Exchange rates were identified at the TTF conference as a significant factor influencing UK import prices for hardwoods in recent years. The GBP is currently trading at only USD1.21, down 30% compared to July 2014. Only once before in the entire history of the two currencies, in the mid-1980s, has the GBP been valued so low against the USD. This exchange rate shift has meant that GBP prices for hardwoods from the US and Asia (where currencies are more closely tied to the USD) have risen sharply.

The GBP has also fallen against the Euro, but much less dramatically, by around 15% from €1.41 at the start of 2016 to the current level of around €1.17, and this only represents a return to the level prevailing in 2014.

### Trends in UK hardwood import market share

Nevertheless, statistics shown at the TTF conference indicated there has yet to be any significant switch from the US to Europe in UK temperate hardwood imports. In fact, the long-term trend in rising US share of UK hardwood imports continued last year. UK imports of U.S. sawn hardwood were 105,000 m3 in 2016, 2% more than the previous year. The US accounted for 32% of all UK sawn hardwood imports in 2016, up from 31% the previous year and around 21% a decade ago.

Several factors explain the continuing increase in US hardwood share in the UK market in 2016 despite the exchange rate trend. The UK is strongly oriented towards oak, which is readily available from the US but for which supplies from Europe have become increasingly restricted in the last two years.

Effective market development campaigns have also boosted UK demand for American tulipwood, an abundant hardwood now very popular for manufacture of kitchen components, mouldings and other interior applications, often substituting for lighter tropical species like ayous which have become less readily available.

The rise in US share in the UK market in 2016 is also partly explained by stock building by UK importers who speculated, rightly as it turns out, that prices for US white oak would continue to rise and the GBP-USD exchange rate continue to weaken throughout the year.

In early 2017, signs are that UK stocks of US hardwood are now quite high and this speculative trend may have run its course. There is some expectation now that the rise in US share of UK sawn hardwood imports peaked last year and will fall in 2017 as the higher prices begin to eat into UK consumption of US hardwoods.

Meanwhile, according to statistics shown at the TTF conference, tropical share of UK sawn hardwood imports was around 30% in 2016, a significant recovery from only around 28% in 2015, but down from levels closer to 40% a decade ago.

As in the UK's temperate hardwood sector, the UK market for tropical wood is now concentrated in a very limited range of species. Sapele from Cameroon and Congo Republic and meranti from Malaysia are overwhelmingly dominant. These species are stocked as utility woods to supply the UK joinery sector.

UK sawn hardwood imports from Cameroon were 23000 m3 in 2016, a slight increase from 21,000 m3 in 2015, but well below levels in excess of 30,000 m3 in each of the years between 2010 and 2014. UK imports of sawn hardwood from the Republic of Congo doubled last year from 7000 m3 to 14000 m3. This follows investment in sawmilling capacity and availability of FSC certified product from two large operators in Congo Republic.

A very large proportion of the around 10,000 m3 of tropical wood the UK imports indirectly by way of the Netherlands is also derived from African countries. Due to scarcity of hardwood kilning capacity in both Africa and the UK, a lot of African wood is dried in the Netherlands before being reexported to the UK.

The UK imported 22,000 m3 of tropical sawn hardwood from Malaysia in 2016, 7% more than the previous year but still less than half the volume prevailing before the financial crises. This forms part of a larger trend as Malaysia has reduced focus on European markets for rough sawn hardwood in favour of emerging markets and more value-added products such as laminated veneer lumber, doors and furniture.

Importers at the TTF conference commented that other tropical hardwoods which were formerly popular in the UK are now rarely imported, in some cases due to substitution by cheaper more readily available alternatives (such as bangkirai decking widely replaced by wood plastic composites and ayous mouldings replaced by wrapped MDF), in others due more to EUTR conformance concerns (such as framire from Ivory Coast).

#### Drivers and constraints in the UK hardwood market

UK importers were asked at the Conference to comment on the main drivers of UK hardwood demand. It was noted that house building in the UK involves very little hardwood, typically only small volumes for stair components and kitchens. Finishing applications such as mouldings, doors, windows, and cabinets are rarely in hardwood for new build. Hardwood is now used mainly for higher end commercial fit-outs and private bespoke projects and products. There's also quite a strong regional concentration, with hardwood demand focused on South East England, particularly London which dominates the commercial sector.

Looking to the future, UK importers at the conference emphasised that lack of training and expertise is now a major obstacle to expanding the market for hardwood in the UK. This problem is apparent both within the UK trade itself and in the manufacturing, retailing, engineering and specifier community.

One UK importer observed that "when selling hardwoods in the past we would be able to talk to a professional hardwood buyer, with expert knowledge and appreciation of the value of the material and of the reliability and reputation of individual suppliers. Now buyers often have limited technical

and industry knowledge and choose suppliers solely on price. This means we all chase each other to the lowest possible denominator, offering the lowest price with less concern for quality".

This lack of training and knowledge goes some way towards explaining the UK's increasing concentration on just a few "big name" species that are familiar to the less well informed, and a widespread unwillingness to experiment or innovate.

The TTF conference also invited comments from representatives of the UK retailing, architectural and engineering sectors. A common theme was that the hardwood industry is generally very poor at providing clear information on product performance and availability. One architect observed that "when we deal in steel, we know exactly what is available – precise sizes and grades – and how it performs. But when it comes to wood, particularly hardwood, there typically isn't clear information, in fact some suppliers seem to go out of their way to withhold information and it's not always clear why".

It was noted that product designers and architects, or their clients, don't have the time or money to investigate new timber species, or for sourcing wood in the correct sizes. One designer observed that "we specify oak all the time, because that's what we know and what seems to be available. Perhaps there are other options out there, maybe cheaper and more readily available, but we simply don't know about them".

However as one importer observed, there is a "chicken and egg" issue to be resolved here. "A designer might like a particular species and request it, but as a natural material, typically sourced from overseas, it can take two to three years to bring a new timber type to market. In practice importers won't stock a species unless there is demand".

The challenge of introducing new hardwood species (or even reintroducing very familiar but unfashionable "old" species) to the market is also apparent in the UK high street furniture retail sector. A representative of one large UK retail chain noted that the company does occasionally pilot test new looks and timber types – for example recently offering some of their most popular table designs which sell extremely well in oak in other European species such as beech, ash, and sycamore – but very rarely do these sell.

An underlying message is that to change fashions and consumer tastes requires a huge amount of time and effort. Materials tend to do well if perceived by the customer to be culturally relevant, but also readily adaptable and flexible in the face of unexpected changes in fashion. This goes a long way to explaining oak's enduring appeal in Europe – the wood is both familiar and yet capable of being presented in a huge range of colours and finishes.

Nevertheless, there are niche opportunities if hardwood species can be matched to specific applications, and buyers can be given sufficient assurance both of their technical attributes and continuing availability. This is well illustrated by American tulipwood, not a popular, or even a familiar timber type in the UK market until recently. However, it is now preferred for many interior applications following a strong market development drive by AHEC and the US industry combining technical information with data to demonstrate the large size of the resource, and with many importers now willing to stock the wood and able to offer at competitive prices.

# Hardwood's sustainability message not helping sales

The TTF Conference also suggested that those who believe that the environmental credentials of hardwood are a unique selling point offering an easy route to market, may need to think again.

Attitudes to sustainability expressed at the conference were typically muddled. The view overall seemed to be that while everyone wants "sustainability", very few are willing to pay for it, or indeed are particularly interested in the details of how it is achieved in practice. The general view of UK importers was that sustainability is not a positive selling point, although the requirement is now so ubiquitous that it must be demonstrated to avoid a loss of market share.

Demand for wood, and particularly hardwood, continues to be restricted in the UK due to prejudice about the unsustainability and illegality of product, despite its record of achievement on this issue. After all, the sector is the only one which can now assure customers that all products placed on the market must be demonstrably from a legal source. However, the retailers at the conference suggested that their perceptions of sustainability are strongly linked to FSC. The implication is that relative lack of FSC in the hardwood sector undermines market demand and attitudes to the material.

This raises profound issues surrounding the role of FSC in hardwood communication — whether it is it more of a hindrance than a help if demand for FSC is not matched, firstly, by more significant progress to achieve certification on the ground in hardwood producing areas; secondly, any real interest on the part of consumers in the genuine technical obstacles to this form certification in many forest environments, notably when timber derives from numerous non-industrial owners that harvest only very rarely, or in tropical countries where certification capacity is still limited; or thirdly, equivalent forms of environmental assurance being demanded of other material sectors.

By offering consumers a deceptively simple, but still imperfect, technical fix to their sustainability concerns, FSC may be distracting buyers from exploring the wider sustainability narrative of their hardwood products, such as the social contribution made by the smallholder forestry sector and the need to maintain the competitiveness of commercial forestry in relation to agriculture and of hardwood relative to other, potentially more environmentally damaging, competing non-wood materials.

The short-comings of the FSC-only approach were well illustrated by one furniture retailer at the TTF conference. The company recently ran a wood furniture promotion campaign in their main London store which included a requirement that all products on display must be FSC certified. The company was keen to include some British hardwood in the display because "the local wood narrative played well with consumers". However, in practice due to lack of FSC supply they were able to display only one small item – a chopping board – from UK forests. Even in the UK, FSC certification is still rare in the private sector where hardwood forest ownership is concentrated.

While the FSC-only approach is still prominent in the UK large retailer sector, other participants at the Conference said that in other sectors there is rising interest in broader sustainability issues. For example the furniture design community is increasingly interested in the wider sustainability narrative surrounding their products, including both with respect to the source of materials and the life-time of products. It was also noted that there is a growing appreciation in the architectural community of the life cycle environmental benefits of using wood, although for the vast majority of building projects this will not, on its own, lead to timber being preferred over other materials.

## CLT: potential to develop a new high volume market for structural hardwoods

While much of the discussion at the TTF Conference focused on constraints and suggested that market prospects for hardwoods in the UK will remain restricted, the TTF Conference ended on a

more optimistic note. A representative of one of the UK's largest engineering firms highlighted the considerable market potential for hardwood Cross Laminated Lumber (CLT).

Use of CLT, which is extremely strong and stable and can be engineered to extremely high tolerances, is allowing timber to be used for the first time for high-density high-rise construction. The world's tallest timber building - completed in 2016 in Vancouver, Canada - has 18 storeys made possible by the use of CLT. Another project just launched in Amsterdam will involve construction of a 21-storey building in CLT.

CLT production capacity in Europe has risen dramatically in Europe in recent years and now amounts to close to 1 million m3 per year, concentrated in Germany and Austria. While production to date has been almost exclusively in softwoods (mainly Spruce), there is growing interest in using hardwoods.

AHEC has been playing a leading role to develop potential for hardwood CLT in Europe and elsewhere. It has been involved in two high profile demonstration projects – the Endless Stair and the Smile – in which leading architects were commissioned to construct large installations as prominent features at the London Design Fair. Both installations demonstrated CLT manufactured using American tulipwood.

These demonstration projects encouraged construction of the first permanent structure in hardwood CLT, a "Maggie's Centre" building recently completed in Oldham in the north of England. According to the architectural contractor, dRMM, hardwood CLT was chosen not only for its "strength and expressive, warm finish" but also because of its health benefits (Maggie's Centres are run by a charity offering professional support to cancer sufferers).

According to dRMM, "wood is known to reduce blood pressure, heartrates and recovery times; it has more health and wellbeing benefits than other building materials, making it the right fit, structurally and conceptually, for Maggie's".

These various CLT projects have shown that use of hardwood for CLT is more expensive than softwood on a per cubic meter basis, but that the extra cost can be offset by the much higher strength achieved by hardwoods. This allows smaller volumes to be specified, saving on the cost of purchasing and transporting materials. Use of hardwood CLT also allows the creation of less bulky and more attractive structures, particularly as architects are increasingly keen to leave the structural CLT elements exposed for display in the finished building.

While at present only temperate hardwoods are being considered for use in CLT, a representative of one large hardwood manufacturer at the TTF Conference suggested there may well be opportunities for tropical hardwood in this sector, given the high strength to weight ratio of many tropical species, and their durability (implying particular advantages for CLT elements exposed to the weather).

While there is potential for use of tropical wood CLT in Europe, it was also noted that some of biggest opportunities may well be in tropical countries where there is rapid growth in demand for more efficient and sustainable high-density construction systems.

The TTF Conference also highlighted that there is much work to be done to exploit the opportunity. The sustainability argument is important but in this sector, as in others, it was emphasised by the representative of one leading UK engineering firm, "there is not a single UK developer who will pay any more for sustainability". He noted that for commercial building "the advantage of wood is speed" and that CLT buildings are "the flat-packed furniture of the construction sector".

It was also emphasised that using any wood for structural applications is a very different proposition from use in joinery — if a building collapses people may be killed and the developer is liable. Any hardwood producer wanting to participate in the CLT market will have to perform structural testing and make available structural strength data. This testing is too expensive and time-consuming to be carried out for individual projects. Therefore, it must be carried out well in advance and the data made readily available. It was also noted that CLT manufacturers, while utilising lower grades of sawn timber, will require wood to be kiln dried and supplied in standard widths and lengths rather than in random sizes.