

I am Director General of the Wood panel Industries Federation ( WPIF). The Wood Panel Industries Federation (WPIF) represents all UK manufacturers of wood panels. There are six manufacturing sites across England, Scotland and Wales. The industry has an annual GVA of over £800M and directly employs 2400 people.

WPIF members produce Chipboard, Oriented Strand Board, and Medium Density Fireboard, supplying approximately 60% of UK demand. These products are used in all areas of construction, including flooring, kitchens, roofing, cladding, furniture and shop fittings etc. Demand for these products is growing, and they have a key role to play within the Government's 'Zero Carbon Homes' agenda.

The industry is dependent upon UK sourced wood resources.

5. Are there any benefits resulting from importing biomass or other biofuels into the UK (e.g. development benefits)? How might these vary internationally? What are the conditions required for any benefits to be realised?

The UK wood basket is limited and in places demand is exceeding supply. Importing biomass fuels can help to mitigate the risks of displacement of industries who are reliant upon using UK domestic wood for material purposes but who's supply base is under threat by subsidized energy companies. Smaller scale (below 50MW) CHP and heat plant that burn woody biomass, derive over 95% of their wood from domestic sources (OFGEM sustainability statistics). In the absence of increased domestic wood supply, the increasing bioenergy demands would have to be met from import if displacement of manufacturing industries is to be avoided.

14. What are the most credible and up-to-date estimates for the amount of bioenergy resource that could be produced from UK waste sources through to 2050? Where possible please state any assumptions relating the reduction, reuse and recycling of different future waste streams.

Data on waste wood arisings (post consumer/Post industrial) within the UK is generally poor. DEFRA published a review of research (July 2012) where the estimates varied widely.

The perceived wisdom within the wood recycling industries is that total waste wood arisings are around 5Mt. According to the Wood Recycling Association demand in 2016 was 3.6Mt but based on known approved energy developments that will see a doubling of waste wood to energy (from 1.5 Mt in 2016/17) to 3Mt in 2018/19, total demand could reach 4.6Mt. However there is significant data uncertainty and the size of export in 2018 is unknown.

As a recycler of waste wood our industries experience is to see a reduction in the availability of wood for recycling as energy demand has increased.

15. What factors (opportunities, constraints, assumptions) should the CCC reflect in its bioenergy resource scenarios through to 2050?

Assessments must reflect actual availability and not just biological availability. As well as physical constraints (e.g.lack of access). Seasonal and Market fluctuations although difficult to predict, should be taken into consideration. Wood supply from the UK in Q4 of 2017 and the start of 2018 has been extremely tight. Higher market demand for sawn products, reduced winter access to the forest and a

reduction in felling over the winter by the large estates has resulted in extremely limited supply. As demand from bioenergy increases these 'pressure points' could increase in frequency and intensity.

18. What are the main opportunities to scale-up the supply of sustainably-produced domestic bioenergy supply in the UK?

As detailed in Q14 there is negligible scope for scaling up the supply of domestically sourced waste wood. The availability changes with economic activity but is relatively stable at around 5Mt p.a.

UK forest yield forecasts to 2050 are available and these suggest supply will reduce from the mid 2030's. Some new planting commitments have been made but commitments on new commercial planting are limited and are further hampered by the fact that significant barriers to new planting remain.

Short rotation forestry could provide an opportunity if land availability and planning constraints can be overcome.

a. What lifecycle GHG emissions savings can be achieved by using WIC? Under what circumstances does WIC fail to deliver GHG emissions savings?

The Wood for Good lifecycle database should be consulted: <https://woodforgood.com/lifecycle-database/>

b. What is the potential for increasing the amount of wood used in construction in the UK? What are the barriers and how can they be overcome?

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Increasing the percentage of timber frame construction in housing would significantly impact on the volume of timber used.

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Refer to: The Modern Timber House in the UK

New Paradigms and Technologies

Peter Wilson

c. What is the potential for using UK-produced timber in construction rather than imports? What are the barriers and how can they be overcome?

Declining wood availability and rising demand for wood fired energy is the biggest barrier to increasing UK timber and timber products for construction. If wood prices continue to rise the softwood sawlog will become attractive for energy use.

Cross laminated

Investing in factory produced and assembled timber systems (modern methods of construction) is the best means of increasing use. There is still potential for more wood panel capacity in the UK.

If CLT is to be manufactured in the UK it has to be associated with a large sawmill and consequently location has to be close to the resource.

d. What is the expected lifetime of different wood products in construction (e.g. cross-laminated timber)?

There is no simple answer to this question. It depends upon the type of building (Design life vs actual life). If they are kept dry, then there is no reason that wood products should not last in excess of 100 years.

e. What currently happens to wood in construction at the end of its useful life? What other viable options should be developed?

Construction and demolition wood that is reclaimed will be used in three principle outlets, i.e. feedstock which is recycled into Chipboard (for use in construction and furniture), garden/ animal bedding products or recovered for energy. A small proportion will be reclaimed for re use.

Treated timber may be Hazardous in which case they would go to landfill or special waste incineration. Timber that is built into elements of construction and can't be separated will go to landfill.

33. What key areas should be reflected in these indicators?

Impacts should be tracked alongside outcomes. Economic, environmental and societal impacts should be taken into account. Indicators shouldn't result in a binary assessment that could pitch material use and energetic uses against each other. Tracking bioenergy in isolation of other renewable energy technologies could result in a reporting a bias in favour of bioenergy.