

Commitment Forum – June 2021

The following notes summarise the discussion held on the ‘*barriers related to using timber as an alternative low carbon building material*’ at the Commitment Forum on 24 June 2021. This session was assisted by [ASBP](#) who are currently undertaking a [Timber Accelerator Hub](#) with the aim to enable more mass timber construction. The notes have been broken down into five key barriers and associated opportunities for how these barriers can be overcome.

This meeting was open to c. 45 UKGBC member signatories to the Net Zero Carbon Buildings Commitment, representing stakeholders from across the property and construction value chain. The notes are being made publicly available to help grow the knowledge pool on barriers and opportunities to delivering net zero carbon buildings at scale. If you would like to provide any feedback on these notes, please contact us at ANZ@ukgbc.org.

Findings:

	Barrier	Opportunities
1.	<p>Lack of regulation, accessible data and knowledge around fire risk</p> <ul style="list-style-type: none"> - UK building regulations currently lack sufficient detail and are at risk of reducing uptake of timber buildings (e.g. restricting use of timber below 18m). - Lack of clear design code for timber and fire safety. - Fire brigades and fire engineers also not bought into timber construction – making testing and delivery more challenging. 	<p>Drive the development of supporting guidance for industry</p> <ul style="list-style-type: none"> - Outlining how to approach timber insurance. - A design note on the challenges experienced dealing with mass timber and lessons learnt e.g. STA guide to fire safety. - Case study library of experiences. - Examples of international regulatory standards. - A risk-benefit analysis of timber compared to other innovative low carbon construction materials/processes e.g. to appreciate just how beneficial timber construction is compared to conventional construction methods. <p>Advocate for government support</p> <ul style="list-style-type: none"> - Lobby government for the need to support the development of the timber industry. - Provide climate arguments e.g. a cost/benefit analysis of timber in achieving net zero in the UK.
2.	<p>Lack of industry experience and guidance</p> <ul style="list-style-type: none"> - Limited design experience with timber, exacerbated by the 18m height restriction, so only relevant in certain applications. - Nascent supply chain and procurement of timber throughout the value chain. - It’s easier and cheaper to use traditional methods of construction. There needs to be a tangible reason to use timber, which extends beyond carbon savings. 	<p>Consider timber within early design</p> <ul style="list-style-type: none"> - To incorporate the timber into design from day 1 (i.e. RIBA Stage 0) rather than as an afterthought. <p>Support throughout the value chain</p> <ul style="list-style-type: none"> - Invest in the supply chain to enable the maturation of timber procurement. - Create a generally agreed, replicable process that reduces risk and helps insurers engage in the process. - Develop industry guidance on how to design for timber buildings.

	Barrier	Opportunities
3.	<p>Lack of capacity for fire testing</p> <ul style="list-style-type: none"> - Currently, every project using timber is having to undergo bespoke testing. - There isn't enough UK or global capacity to keep up with the growing demand. Meaning that timber-based construction is being delayed and/or deemed unfeasible. - There is a lack of flexibility after the testing has taken place for the design to be adapted. 	<p>Sharing testing data</p> <ul style="list-style-type: none"> - To reduce the repetition of testing, quantitative and qualitative data could be shared across the industry within one info-sharing data hub. - After carrying out bespoke testing, organisations could openly disclose data and outcomes from testing – e.g. Arup: https://www.arup.com/perspectives/large-compartment-fire-experiments-expanding-knowledge-of-building-safely-with-timber - Investigate global experiences/data sources from existing and well-known timber projects. <p>Standardise testing</p> <ul style="list-style-type: none"> - Make openly accessible data on individual hybrid slabs of timber, or simple structures, to reduce the need for bespoke testing.
4.	<p>Increased cost compared to traditional methods</p> <ul style="list-style-type: none"> - Uncertain (and perceived higher) cost of building, testing and insurance compared to traditional building options. 	<p>Work collaboratively with value chain to lower costs</p> <ul style="list-style-type: none"> - Share experience and data to provide evidence to supply chain and insurers. - Create a 'Captive Insurer' initiative for developers of timber buildings to slash cost of insurance due to shared risk.
5.	<p>Poor client perception</p> <ul style="list-style-type: none"> - There is a perception that timber has a high fire risk and is costly. - Dismissed as unviable early on due to limited information. 	<p>Justify the use of timber as highly suitable</p> <ul style="list-style-type: none"> - Demonstrate the co-benefits of timber buildings e.g. faster construction times, carbon/cost savings, health and wellbeing benefits for end-users. - Support the development and delivery of accessible guidance. - Collect and build data sources to evidence timber usage.

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