JOINT COMMITTEE ON HOUSING, LOCAL GOVERNMENT AND HERITAGE TUESDAY, 02 MAY 2023
OPENING STATEMENT

#### MARK CARLIN, MANAGING DIRECTOR, COILLTE FOREST

Thank you Chairman, good afternoon Deputies and Senators, and thank you for the opportunity to engage with the committee on Modern Methods of Construction.

With me today is my colleague Des O'Toole who works extensively with our forest industries to develop and promote the use of homegrown timber in applications such as modern methods of construction, the main topic of the debate today.

## Overview of Coillte - The Multiple Benefits of Forests

Our forests have never been more important to society, in terms of addressing many of the challenges that we face today, such as climate change and biodiversity loss; and also providing a valuable source of products and materials that will help drive sustainable living. Recognising this, Coillte recently launched a new long-term vision for our future forest estate; which aims to balance and deliver the multiple benefits from our forests across four strategic pillars - climate, nature, wood and people. Our ambition is to create new forests and manage our existing forests for greater carbon capture, and to provide more habitats to protect and enhance biodiversity. Additionally, we will increase forest recreation areas for everyone to enjoy. And we will support the creation of new homes by continuing to deliver sustainable Irish wood products that will underpin the decarbonisation of our built environment.

# Climate Benefits of Building with Wood

Ireland's built environment currently represents 37% of overall annual greenhouse gas emissions, with 14% of this being 'embodied carbon', that is the carbon required to construct our buildings. Timber products have a dual advantage over traditional building products in that they have a lower embodied carbon, and a higher level of stored carbon. A recent COFORD report looked at both the 'embodied carbon' and the 'carbon stored' in building materials. This report clearly identifies a net carbon saving of 8t CO<sup>2</sup><sub>e</sub> when we build a timber frame home rather than a traditional one.

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This equates to a 2.5 times net carbon saving for each new home built. The benefits of building with wood for mitigating climate change are well understood, but we can do so much more in Ireland. Today, only about 25% of housing units are built with timber-frames, whereas this figure is closer to 80% in Scotland and even higher in Scandinavia. Therefore, there is an opportunity in Ireland to embrace timber based Modern Methods of Construction at a meaningful scale.

## **Delivering Rapid and Sustainable Housing**

In addition to the obvious climate benefits of building with wood, there are many other advantages. The off-site prefabrication of timber frames and mass timber (such as Glulam & CLT) provide a quality-controlled environment that results in less waste and environmental impacts from construction. According to the EPA, 8.2 million tonnes of construction waste was generated in 2020. Prefabrication significantly reduces onsite waste, thereby supporting our circular economy. Using prefabrication is also much less labour intensive, enabling us to build our homes faster than traditional methods of construction. For example, a typical timber frame home is over 6 times quicker to build onsite, taking only 1 week to construct the main structure.

## Key Enablers for Building with Wood

In order for us to be able to take advantage of the many benefits of building with wood, key enablers must be put in place.

(i) Policy & Regulation: It is worth reflecting on the fact that unlike our European counterparts, Ireland does not have a culture of using wood in construction. Our building regulations currently have a 10 metre height limit in the use of timber, which is only 3 storeys. Mass timber buildings of up to 24 stories are being constructed elsewhere, so the regulations must be changed in Ireland. We are also of the view that embodied carbon needs to be measured and quantified for all new builds. We need to prioritise low carbon materials and fast-track the introduction of embodied carbon targets and thresholds.

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- (ii) Education & Promotion: The traditional methods with which we construct our buildings are being challenged and we need to promote a better understanding of the benefits of building with timber and provide the necessary technical guidance and support to our design professionals to allow them to build with these new technologies.
- (iii) <u>Demonstrator Buildings</u>: There is an opportunity to demonstrate the advantages of building with wood in our public building and social housing projects. These projects will help drive demand, grow skills and increase confidence in these building technologies; allowing the industry to build capacity and increase investment.

## **Looking Forward**

Looking forward, we are very well positioned to take advantage of the opportunity to increase the use of wood in Modern Methods of Construction. We have an increasing softwood fibre resource in Ireland, so we can increase our self-sufficiency in meeting our future timber requirements. We have a leading forest products industry with the technology and capacity to produce the quality timber products we need to build low carbon homes. Accelerating the use of wood in construction is no longer a desire, it is now a climate imperative. Ireland has an opportunity to be at the cutting edge of the next timber building revolution.

To conclude, we offer you an open invitation to visit Beyond the Trees, Avondale, where Coillte have pushed the technical boundaries with homegrown Sitka spruce and Douglas fir being used to showcase what is possible in construction, when forestry, sawmilling, innovation and engineering work together.

Thank you.