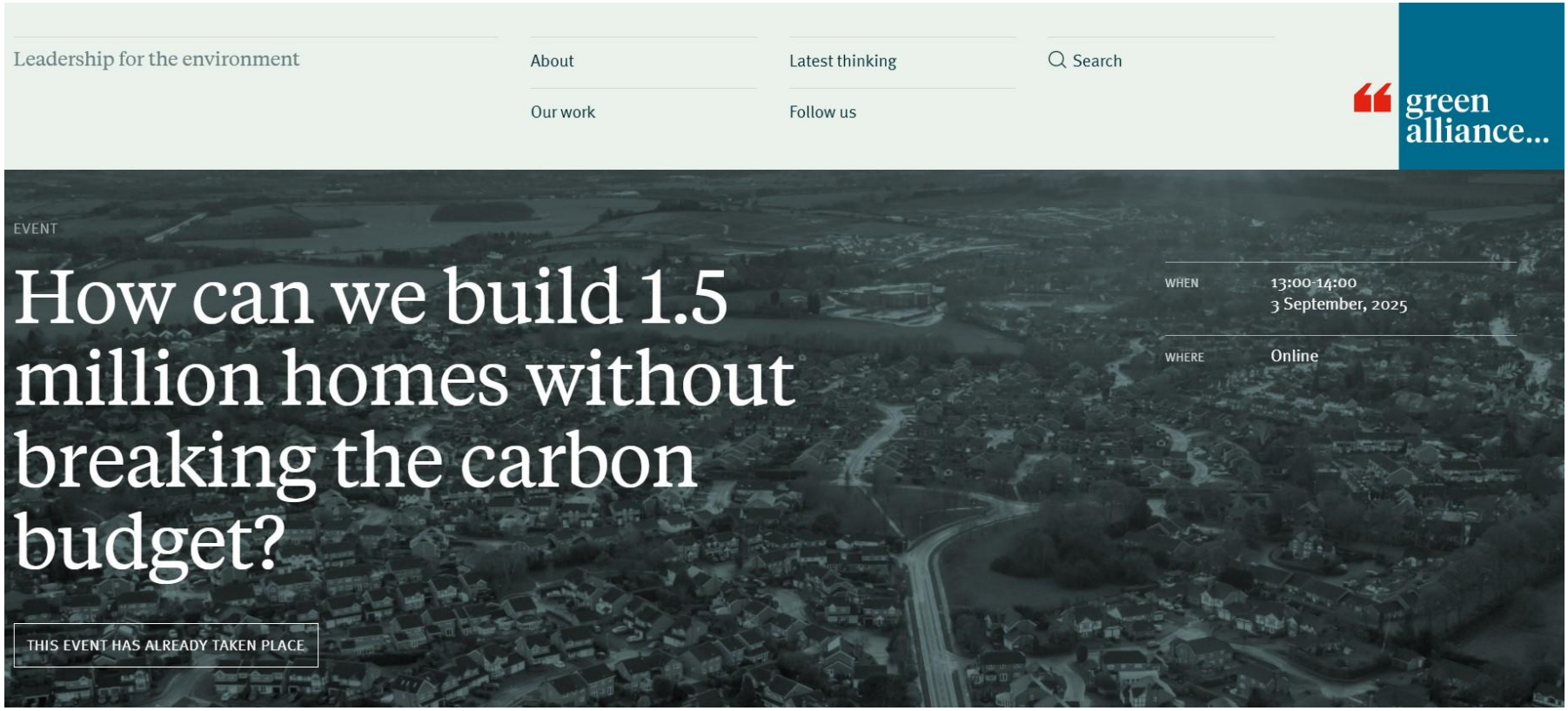
Timber! How Wood Can Help Save the World from Climate Breakdown

Structural Timber Association Conference

National Conference Centre
Birmingham
Wednesday 1st October 2025

Paul Brannen
Director Public Affairs
Confederation of Timber Industries


BBC INDEPTH
Labour's plan to build 1.5m homes – can it be delivered?
26 September 2024


Leadership for the environment
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EVENT
How can we build 1.5 million homes without breaking the carbon budget?
WHEN
13:00-14:00
3 September, 2025
WHERE
Online
THIS EVENT HAS ALREADY TAKEN PLACE


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Benefits of nature-based materials

- Sequestration
- Substitution
- Storage

= Big climate wins

Do the government ‘get it’?

Context

GOV.UK Menu

Home > Environment > Rural and countryside > Forests and woodland > Timber in construction roadmap 2025

Department for Environment, Food & Rural Affairs

Policy paper

Timber in construction roadmap 2025

Published 27 February 2025

The UK faces some of its biggest challenges yet – climate change, the housing crisis and driving economic growth.
Timber offers a solution as a renewable, low-carbon resource.
It offers immense potential to reduce emissions, create jobs, and build the homes we need.
We must increase the production and use of sustainable, homegrown timber.

Mary Creagh MP the Minister for Nature

https://www.telegraph.co.uk/news/2025/03/11/labours-plan-timber-houses-net-zero-environment/

More houses to be built out of wood under Labour's net zero plan

Proposals aim to also stimulate demand for British timber, create new green jobs and boost rural economies

Joe Pinkstone Science Correspondent. **Amy Gibbons** Political Correspondent. **Tom Haynes** Money Reporter

Related Topics
Housing crisis, Labour Party, Department for Environment, Food & Rural Affairs (DEFRA), Net Zero, UK economy, New homes

11 March 2025 4:03pm GMT

439

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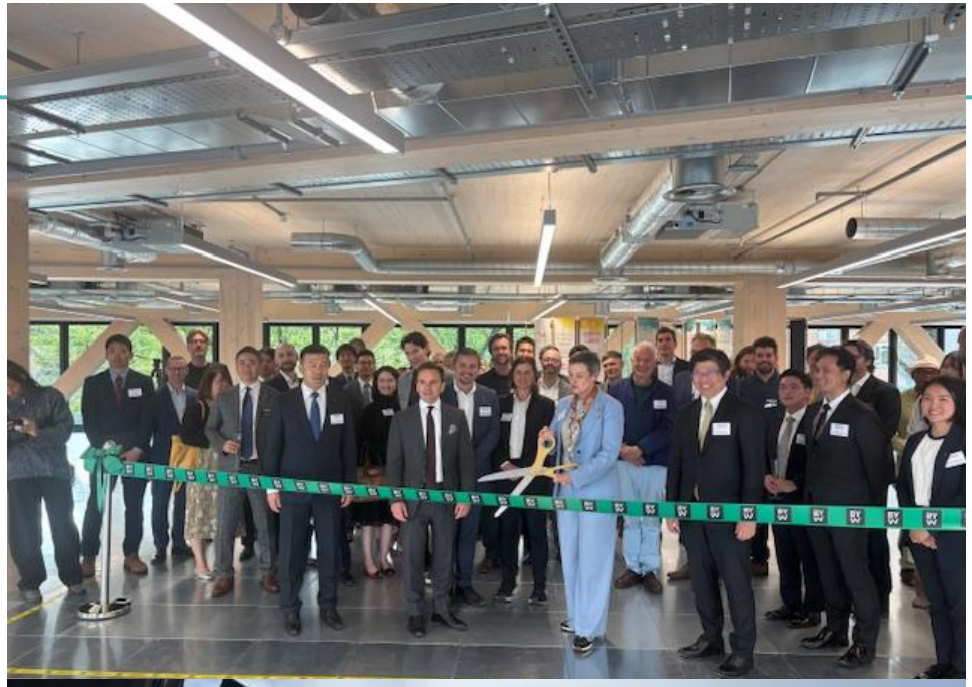

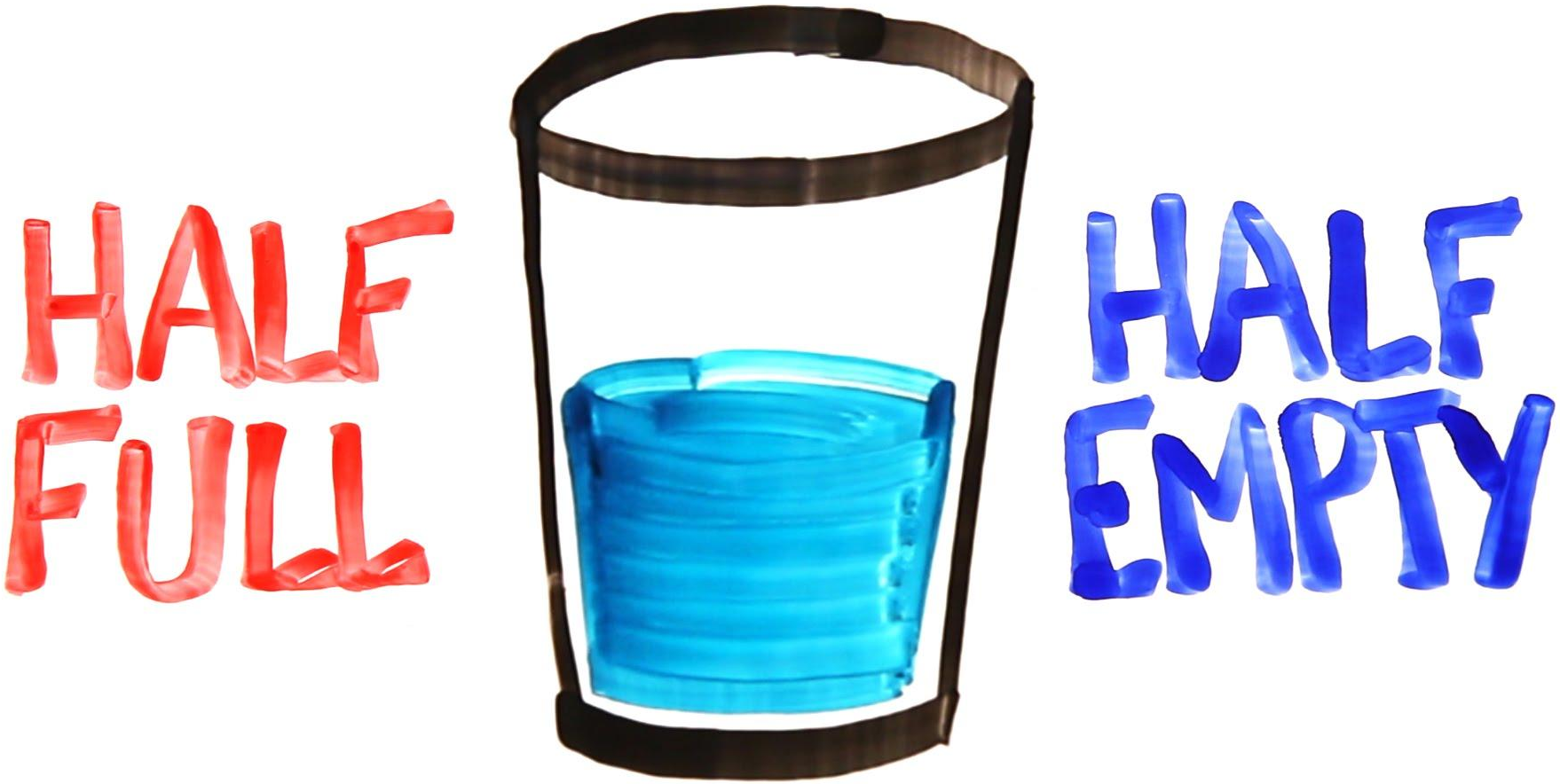
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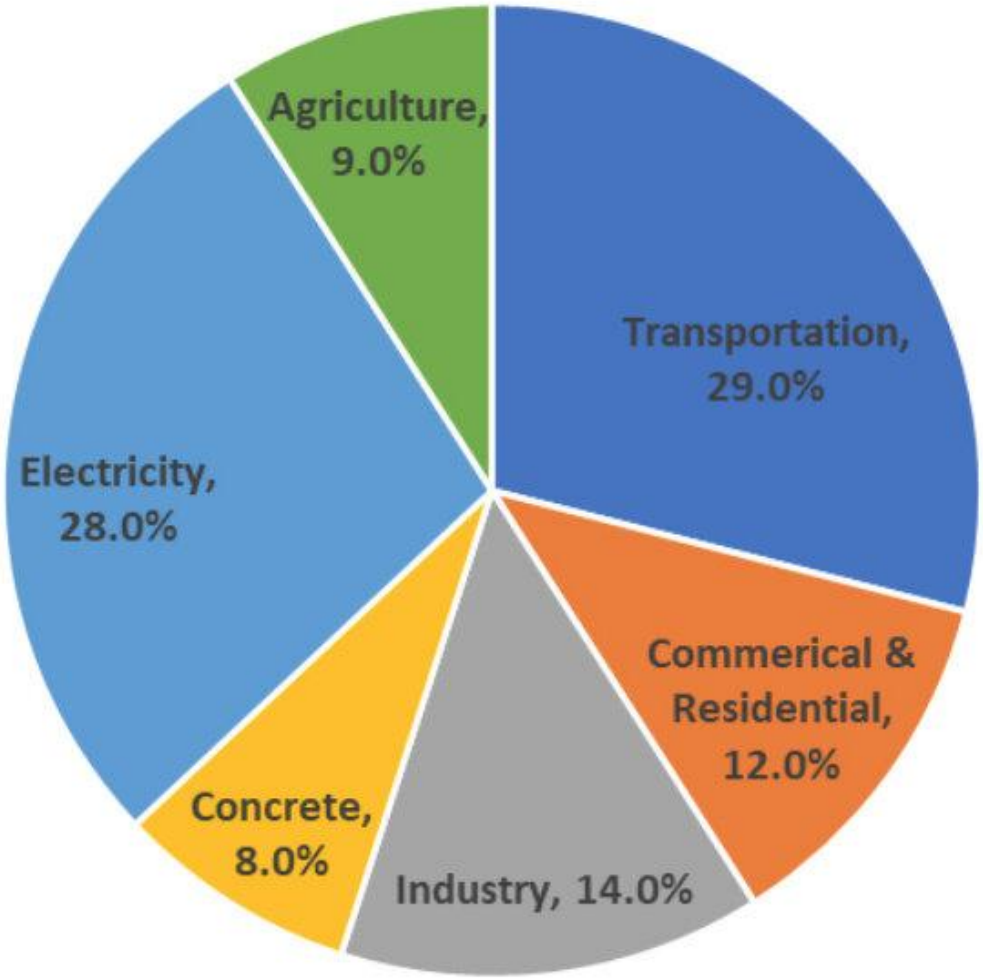

Agriculture, 9.0%
Transportation, 29.0%
Electricity, 28.0%
Commerical & Residential, 12.0%
Concrete, 8.0%
Industry, 14.0%

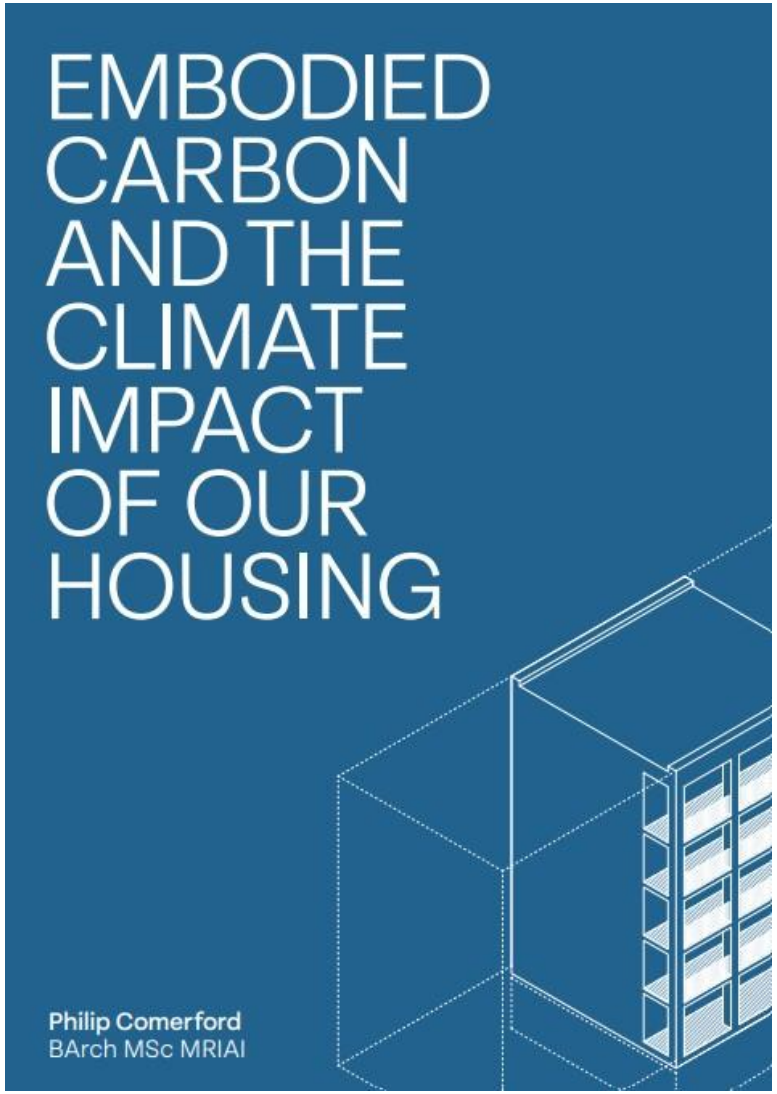
Limestone quarries and cement factories are often sources of air pollution. Photograph: Zoonar GmbH/Alamy

Best of 2019

This article is more than **6 years old**

Concrete: the most destructive material on Earth

SUBSTITUTION


EMBODIED CARBON AND THE CLIMATE IMPACT OF OUR HOUSING
Philip Comerford
BArch MSc MRIAI

Construction industry leaders call on new Labour Government to introduce embodied carbon regulation

GOV·UK

Home > Housing, local and community > Planning and building > Energy efficiency in buildings

Research and analysis

Consideration of embodied carbon in new buildings

Research report on the practical, technical and economic impacts of measuring and reducing embodied carbon in new buildings.

From: Ministry of Housing, Communities and Local Government

Published 7 July 2025

‘More timber in more buildings’

rather than

‘More timber buildings’

Hosta, Paris, France

Hardel Le Bihan's design of Hosta stands out as one of France's most exciting mass timber buildings to open this year, thanks to its leveraging of engineered wood's lightweight properties to bridge six lanes of traffic!

This technical tour de force significantly contributes to the transformation of a busy urban crossroads, accommodating seven-storey halls of residence for young workers, a feat that would have been impossible at such height with concrete.

Read more: Hosta, Paris, France

Stora Enso Partner: Woodeum
Photo: ©Potion Mediatique

All the UK's biggest housebuilders have or are acquiring or are building their own timber frame operation.

Wooden-panels

10% of the UK economy is made up of wood panel reliant industries such as construction and leisure.

CARBON STORAGE

Measuring Mass Timber

Deriving a mass timber whole life carbon & quality of life method by evaluating five mass timber UK buildings

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Nearly £22bn pledged for carbon capture projects

The government said the move would give industry confidence to invest in the UK, attracting £8bn of private investment, directly creating 4,000 jobs and supporting 50,000 in the long term.

It will also help remove 8.5 million tonnes of carbon emissions each year, officials said.

The projects are expected to start storing captured carbon from 2028.

Potential of the UK built environment to store carbon in timber

Carbon storing options
Family homes built with timber frame
Wood fibre insulation in a family home with timber frame
Mass timber builds
Wood fibre insulation in mass timber builds

Potential of the UK built environment to store carbon in timber

Carbon storing options	Amount and source of information
Family homes built with timber frame	4.6 tonnes of stored CO_2e Leading UK house builder
Wood fibre insulation in a family home with timber frame	3.5 tonnes of stored CO_2e (76% of frame storage) Steico
Mass timber builds	1,032 tonnes CO_2e per build dRMM report
Wood fibre insulation in mass timber builds	176 tonnes CO_2e (17% of the frame) Folkhem, Sweden

Potential of the UK built environment to store carbon in timber

Carbon storing options	**Source of information**	**Business as usual for family homes, small increase for % of market for mass timber**			
Family homes built with timber frame	Leading house builder 4.6 tonnes of stored CO_2e	15% of 300K = 45K = 207,000tCO_2e			
Wood fibre insulation in a family home	Steico 3.5 tonnes of stored CO_2e (76% of frame storage)	Less than 1% = negligible			
Mass timber builds	dRMM report 1,032 tonnes CO_2e per build	300 UK cities/towns where mass timber appropriate Built 2 each per yr = 600 x 1,032 = 619,200tCO_2e			
Wood fibre insulation in mass timber builds	Folkhem, Sweden 176tCO_2e (17% of the frame)	= 600 x 176 = 105,600tCO_2e			
Totals per year		931,000tCO_2e per year Annual emissions of Gateshead plus some			

Potential of the UK built environment to store carbon in timber

Carbon storing options	**Source of information**	**Business as usual for family homes, small increase for % of market for mass timber**	**A big increase to** **% of market**		
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Wood fibre insulation in mass timber builds	Folkhem, Sweden 176tCO_2e (17% of the frame)	= 600 x 176 = 105,600tCO_2e	= 1,500 x 176 = 264,000tCO_2e		
Totals per year		931,000tCO_2e per year Annual emissions of Gateshead plus some	2,278,500tCO_2e per year Annual emissions of Sunderland & Newcastle		

Potential of the UK built environment to store carbon in timber

Carbon storing options	**Source of information**	**Business as usual for family homes, small increase for % of market for mass timber**	**A big increase to % of market**	**A very big increase to % of market**	**A massive increase to % of market**
Family homes built with timber frame	Leading house builder 4.6 tonnes of stored CO_2e	15% of 300K = 45K = 207,000tCO_2e	30% of 300K = 90K = 414,000tCO_2e	50% of 300K = 150K = 690,000tCO_2e	80% of 300K = 240K = 1,104,000tCO_2e
Wood fibre insulation in a family home	Steico 3.5 tonnes of stored CO_2e (76% of frame storage)	Less than 1% = negligible	5% of 300K = 15K = 52,500 tCO_2e	20% of 300K = 60K = 210,000tCO_2e	50% of 300K = 150K = 525,000tCO_2e
Mass timber builds	dRMM report 1,032 tonnes CO_2e per build	300 UK cities/towns where mass timber appropriate Built 2 each per yr = 600 x 1,032 = 619,200tCO_2e	Built 5 each per yr = 1,500 x 1,032 =1,548,000tCO_2e	Built 20 each per yr = 6,000 x 1,032 = 6,192,000tCO_2e	Built 40 each per yr = 12,000 x 1,032 = 12,384,000tCO_2e
Wood fibre insulation in mass timber builds	Folkhem, Sweden 176tCO_2e (17% of the frame)	= 600 x 176 = 105,600tCO_2e	= 1,500 x 176 = 264,000tCO_2e	= 6,000 x 176 = 1,056,000tCO_2e	= 12,000 x 176 = 2,112,000tCO_2e
Totals per year		931,000tCO_2e per year More than Gateshead	2,278,500tCO_2e per year Newcastle & Sunderland	**8,148,000tCO_2e per year** Slightly less then NECA	14,013,000tCO_2e per year NECA, Leeds & Manchester

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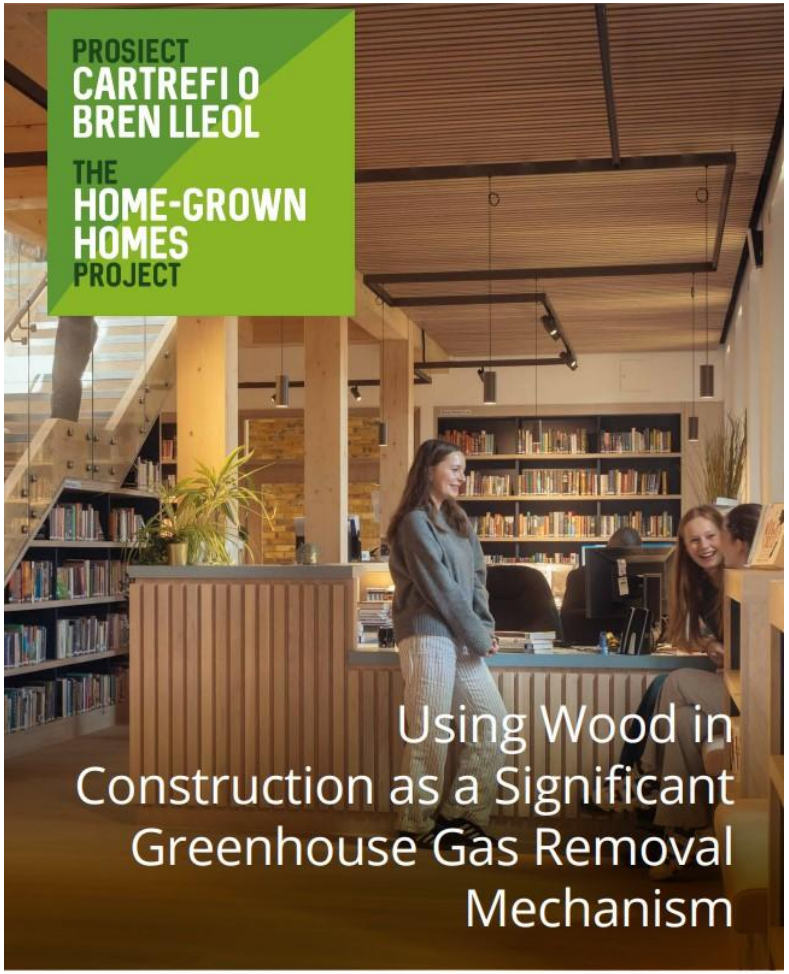
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BREN LLEOL
THE
HOME-GROWN
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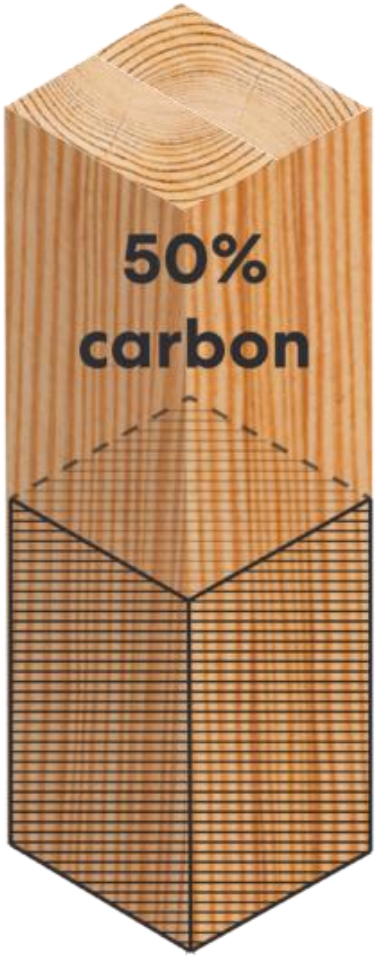
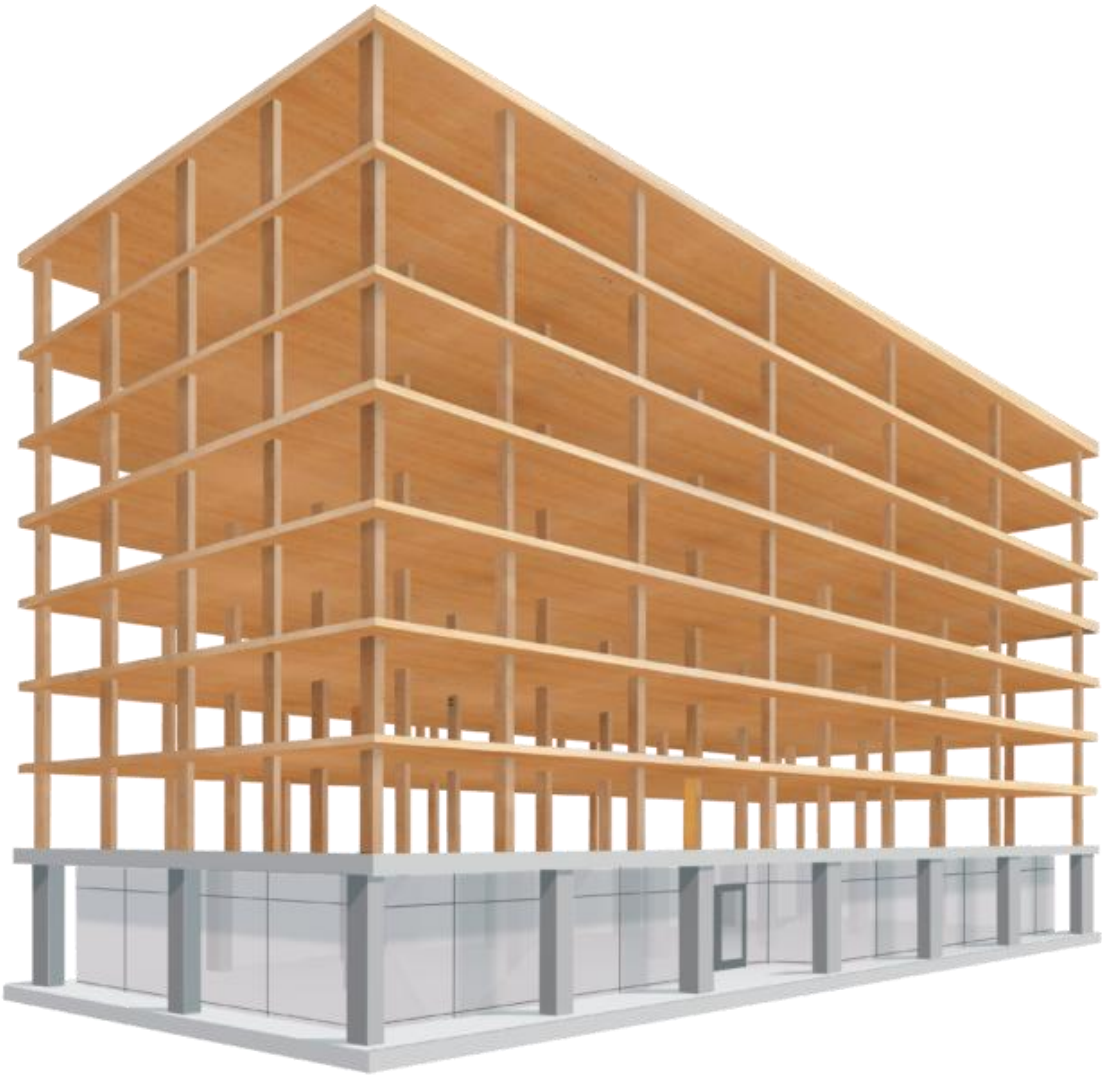
PROJECT
Using Wood in Construction as a Significant Greenhouse Gas Removal Mechanism


Education Center
Planting Trees for Carbon Credits:
Everything You Need to Know
CARBON CREDITS
.com


50%
carbon



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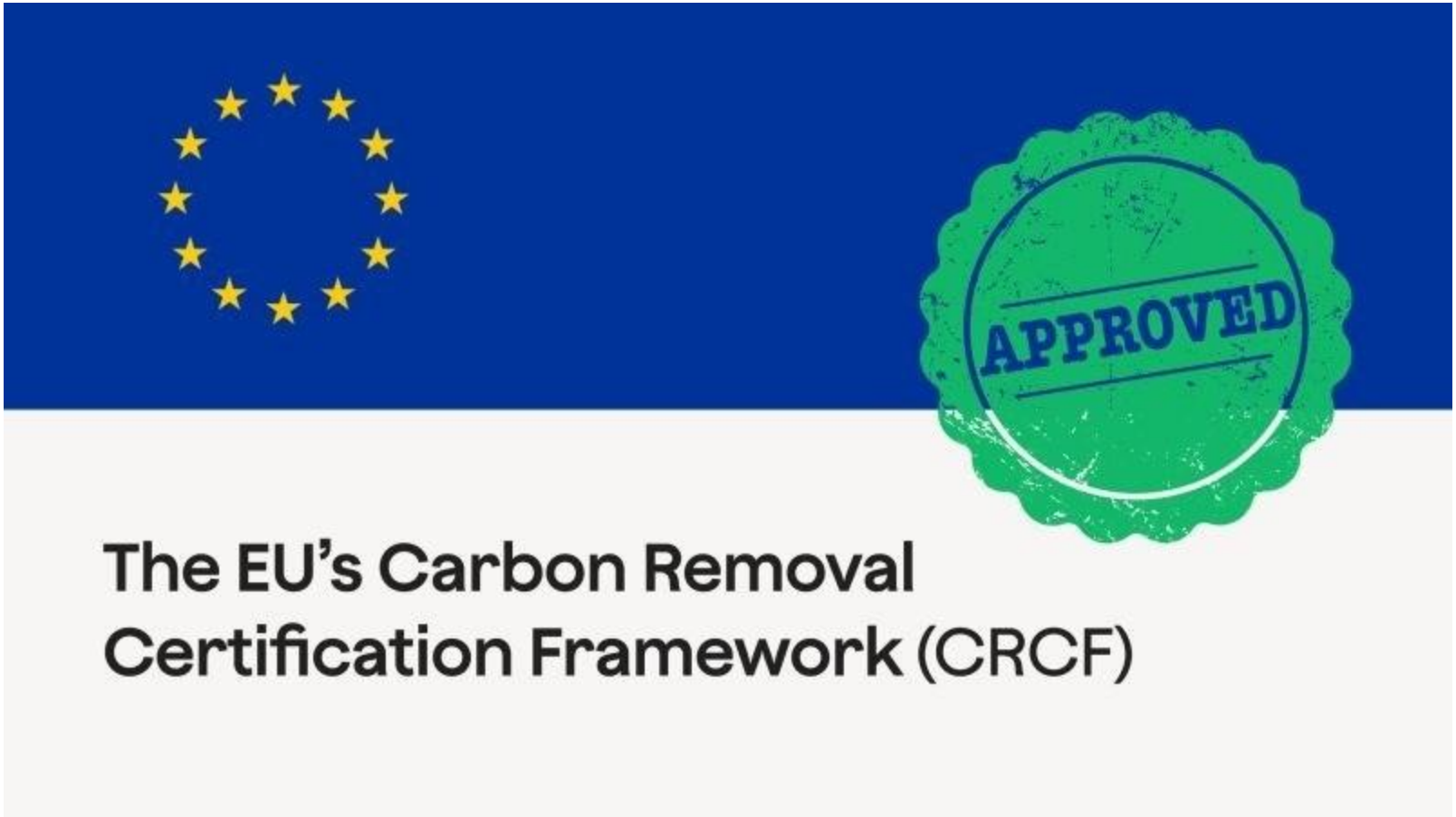
Katie Ta · 22 Sep 2022 · Featured Posts, News · 0

Aureus Earth and the University of Washington Execute Ground-Breaking Carbon Offset Transaction for a Mass Timber Building

Project to store 1,000 tons of CO2 for decades, keeping carbon out of the atmosphere for the lifetime of the building

Aureus Earth, the world's leading provider of carbon offsetting incentive programs for the construction industry, today announced its first transaction that values the long-term biogenic carbon storage in a mass timber building. The transaction was accomplished in partnership with the University of Washington (UW) Foster School of Business, using the newly completed Founders Hall mass timber building as a proof of concept.



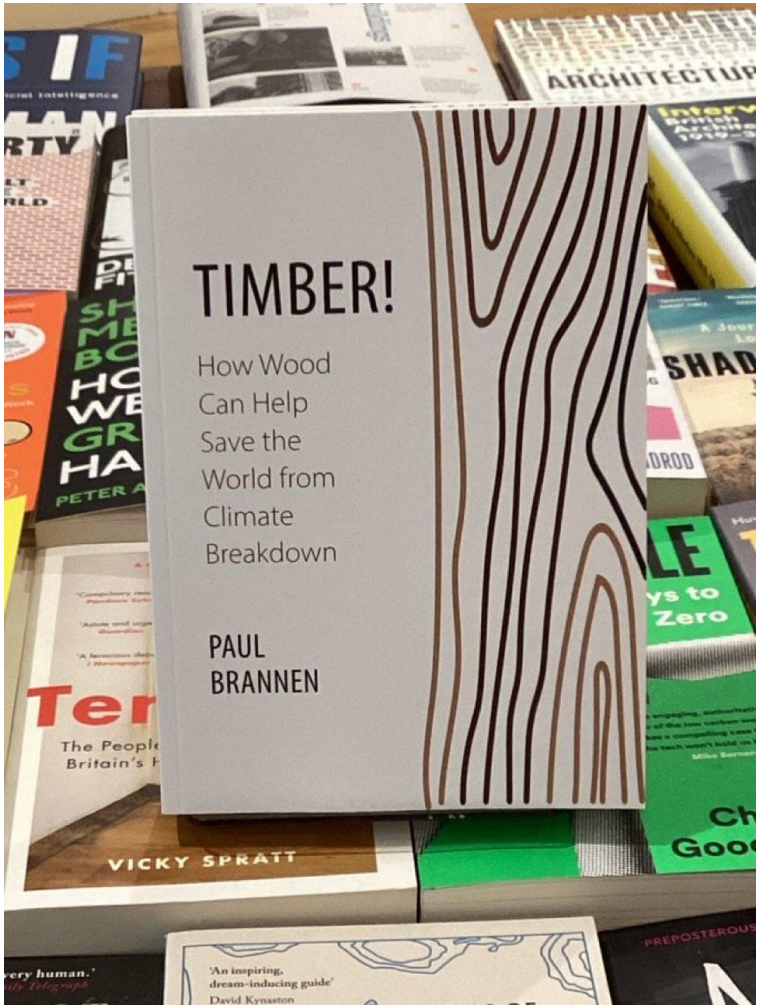
The EU's Carbon Removal Certification Framework (CRCF)

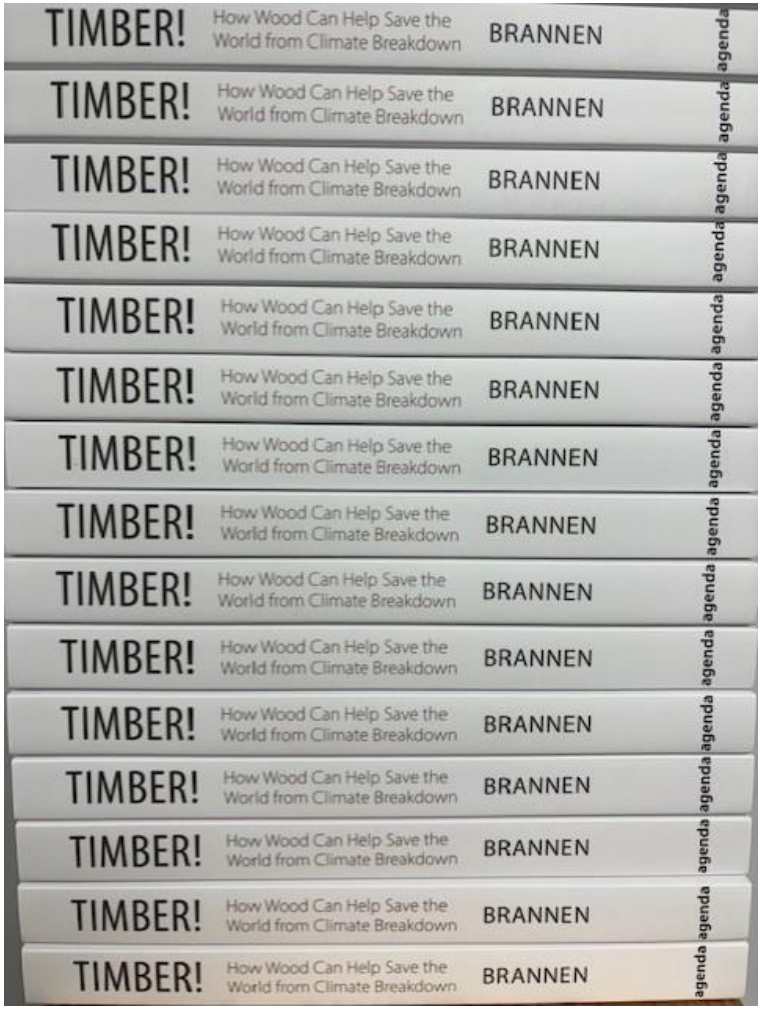

Grown in Britain

Conclusion:

Timber in construction delivers:

- **Sequestration**
- **Substitution**
- **Storage**





Conclusion:

- **Less concrete**
- **Less steel**
- **More trees**
- **Fewer sheep**
- **More wood - in more buildings**

Context

- wood currently is the most important biogenic material in Europe

Context
– huge demand for green feedstocks

Potential of the UK built environment to store carbon in timber

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nature sustainability

Article | Open access | Published: 30 July 2025

Global wood harvest is sufficient for climate-friendly transitions to timber cities

Alperen Yayla, Adam R. Mason, Junyang Wang, Stijn van Ewijk & Rupert J. Myers ✉

Nature Sustainability **8**, 1013–1025 (2025) | Cite this article