

Greenhouse Gas Emissions Report

Vastern Timber



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Description of the reporting organisation

Vastern Timber, The Sawmills,
Vastern Wharf, Royal Wootton Bassett SN4 7PD
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Vastern Timber is the largest hardwood saw milling company in the UK. The vast majority of wood products are bought and sold within one hundred miles of the sawmills. Vastern Timber manufactures oak beams, timber cladding and hardwood flooring. The company specialises in British grown timbers, including English oak, sweet chestnut, ash, sycamore and larch, as well as speciality softwoods, such as larch, western red cedar and Douglas fir.

Person responsible

Tom Barnes (Managing Director)

Reporting period covered

Calendar year 2021

Documentation of organisational boundaries

The boundaries of this study are all sales and processing of timber by Vastern Timber for the calendar year 2021

GHG emissions

The GHG emissions were calculated based upon conversion factors given by the UK Government (BEIS) in 2022, obtained from:

<https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

JCH Industrial Ecology Ltd has been engaged by Vastern Timber Ltd to undertake an analysis of Greenhouse Gas (GHG) emissions associated with the activities of Vastern.

Intended use and intended users of the report

Business to business and business to consumer.

Overall and specific responsibilities for preparing and producing the report

The supporting background report was prepared by Callum Hill of JCH Industrial Ecology Ltd.

Frequency of the report

Two years

Period for which the report is valid

Two years

Report format

Electronic format (pdf)

Data and information included in the report

Scope 1, 2, and 3 GHG emissions as defined in ISO 14064-1, plus a calculation of the atmospheric sequestered carbon stored in the timber produced by Vastern Timber in 2021.

Emissions of biogenic carbon arising from combustion in the biomass boiler are also reported in Out-of-Scope emissions.

The report has been produced in accordance with the requirements of ISO 14064-1:2018 Greenhouse Gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

The report distinguishes between Scope 1, 2 and 3 emissions, which are defined as follows:

Scope 1 emissions

Scope 1 emissions are direct greenhouse (GHG) emissions that occur from sources that are controlled or owned by an organisation (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles).

Scope 2 emissions

Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling. Although Scope 2 emissions physically occur at the facility where they are generated, they are accounted for in an organisation's GHG inventory because they are a result of the organisation's energy use.

Scope 3 emissions

Included in Scope 3 emissions are: purchased goods and services, capital goods, fuel-and-energy-related activities, upstream transportation and distribution, waste generated in operations, business travel, employee commuting, upstream leased assets, use of sold products, end of life treatment of sold products.

Calculation of GHG emissions

The GHG emissions data in this report was calculated by using the appropriate Conversion Factors for Greenhouse Gas Company Reporting which are published annually by the Greenhouse Gas Inventory (GHGI) team in BEIS.

It is stated by BEIS that:

‘the conversion factors are based primarily on the National Atmospheric Emissions Inventory (NAEI) which is compiled according to the Intergovernmental Panel on Climate Change (IPCC) 2006 Guidelines. Each year the inventory is updated to include the latest data available.

The inventory is subject to annual review by the National Inventory Steering Committee, managed by BEIS, and is subject to further scrutiny via annual expert reviews conducted by the EU and United Nations Framework Convention on Climate Change (UNFCCC).

The inventory has recently been recognised as “...a robust and accurate inventory when compared internationally” by the National Physical Laboratory’.

GHG emissions = activity x conversion factor

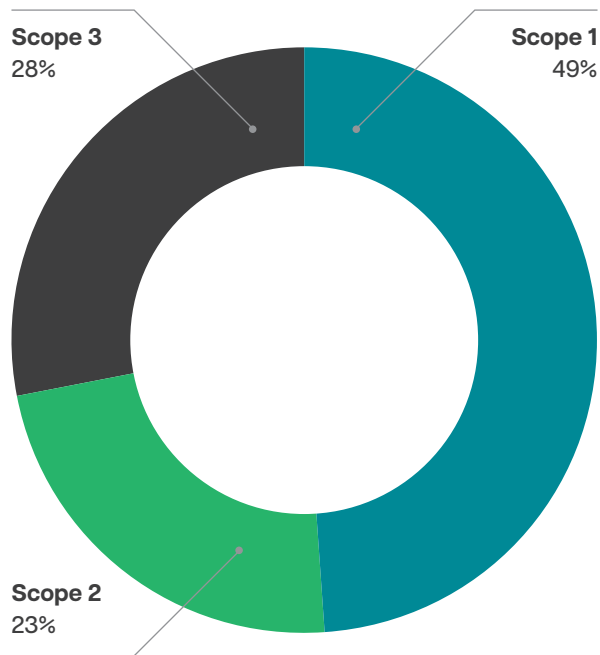
The calculated emissions for the Vastern organisation also contain a contribution which is included in the EPD for Brimstone timber, which is included in the total.

Data has been taken from the published EPD, which is related to transportation and thermal modification only, the details are given in Appendix 1 of the report supporting this declaration.

Summary

The Scope 1, 2, and 3 emissions for the Vastern organisation for the calendar year 2021 are summarised in the table and chart:

In-Scope emissions



Item	GHG Emissions in Tonnes CO ₂ Equivalent		
	Scope 1	Scope 2	Scope 3
Delivery vehicles (fuel use) HGV	48.6	-	-
Fuel oil	178.4	-	-
Business travel- land	-	-	48.4
Delivery vehicles (mileage data) HGV	-	-	101.5
Freight transport RAIL	-	-	22.9
Freight transport SHIP	-	-	13.5
Electricity (generation)	-	163.5	-
Electricity (transmission losses)	-	-	13.6
Biomass boiler	6.8	-	-
Lubricants	2.4	-	-
Brimstone	110.8	-	-
Total GHG emissions (2021)		710.4 Tonnes CO₂e	

Summary continued

Out-of-Scope emissions

Item	GHG Emissions in tonnes CO ₂ equivalent
Emissions of biogenic carbon from biomass boiler	227
Biogenic carbon stored in wood sold	-6988

Total emissions (including Brimstone)

Total volume of wood sales in 2021 (including Brimstone)	6,034m ³
Total emissions of GHGs in 2021	710,418kg CO ₂ e
Emission of GHG per m³ of timber sold (including Brimstone)	118kg CO₂e

Brimstone can be considered a special case for this analysis since the product already has an EPD and at the time of analysis production was in France.

If the impact associated with the production of Brimstone and the volume of Brimstone sold in 2021 is removed from the calculation, it is possible to work out the GHG emissions associated solely with the production of unmodified wood.

Total emissions (excluding Brimstone)

Total volume of wood sales in 2021 (excluding Brimstone)	5,535m ³
Total emissions of GHGs in 2021 (excluding Brimstone)	599,622kg CO ₂ e
Emission of GHG per m³ of timber sold (excluding Brimstone)	108kg CO₂e

From this baseline data, Vastern Timber will calculate emissions reductions every two years.

During 2022 progress has been made in this respect:

- Modification of the Brimstone product is now carried out **on site** rather than in France.
- Company cars have been switched for **electric** models.
- Installation of **solar panels** with 140KW capacity is planned for early 2023.

For further information and
detailed data please contact
Vastern Timber

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