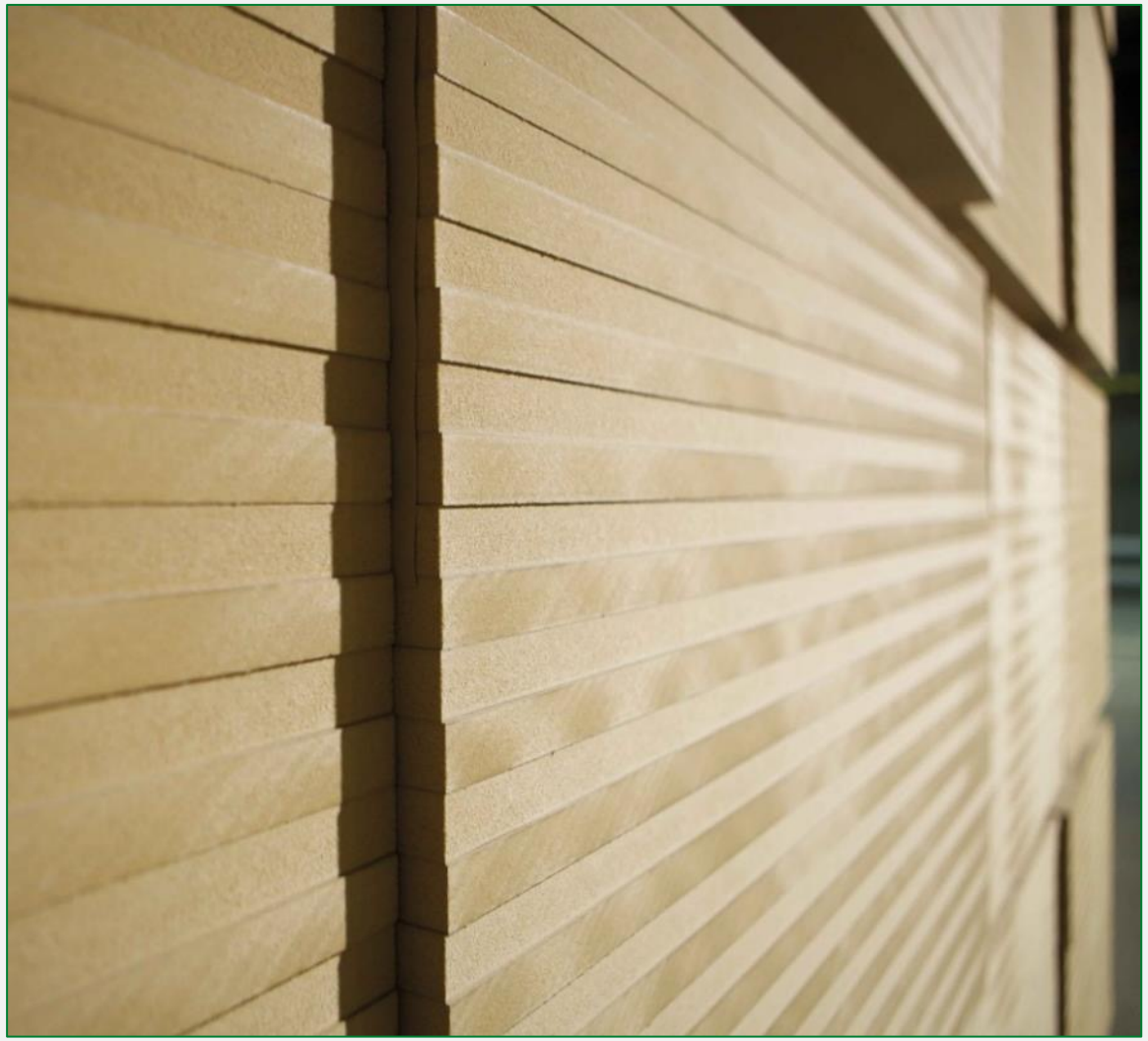
LESSONS LEARNED FROM GAINING AN EPD

David Murray
Head of Technical Affairs & Ireland Sales

OVERVIEW OF MEDITE - MDF

MEDITE® SMARTPLY®
INNOVATIVE TIMBER PRODUCTS



OVERVIEW OF SMARTPLY - OSB

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THE COMMERCIAL PERSPECTIVE!

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- Ask yourself why are you doing it?
- Will it be worth it?
- Is it a regulation or requirement?
- Do your customers want it? (do they know why?!)
- Do specifiers want it?
- Do your competitors have it?
- Will it lead to higher value specifications and sales?
- How do you prevent product substitution?
- Do your sales team understand how to sell the benefits?
- Is training required?
- Do you see EPD's being more important in the future?
- Will digital specification (eg linking EPD into BIM) become the norm?

7 BENEFITS OF PUBLISHING AN EPD

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1. Gain competitive advantage
2. Be the most respected supplier on the market
3. Implement a green marketing strategy
4. Improve supply chain management
5. Support Environmental Management Systems
6. Benchmark and compare products
7. Visibility on International Markets

IF IT CAN'T BE MEASURED, IT CAN'T BE REDUCED!

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Environmental Product Declaration (EPD)

- **Declaration of Materials Carbon Footprint**
- Output of Life Cycle Analysis (LCA)
- EN 15804 compliant
- Product specific Type III EPDs
- Independently verified
- Completely voluntary
- Provides Transparency
- Eliminates 'Greenwashing'
- Typically lower GWP values than 'generic' product EPDs
- Published on European EPD database
- Available in digital format
- Enables whole life carbon assessment of buildings
- MEDITE SMARTPLY commitment to sustainability
- Onus is now on Specifiers to demand EPDs!

WHAT GETS MEASURED GETS DONE!

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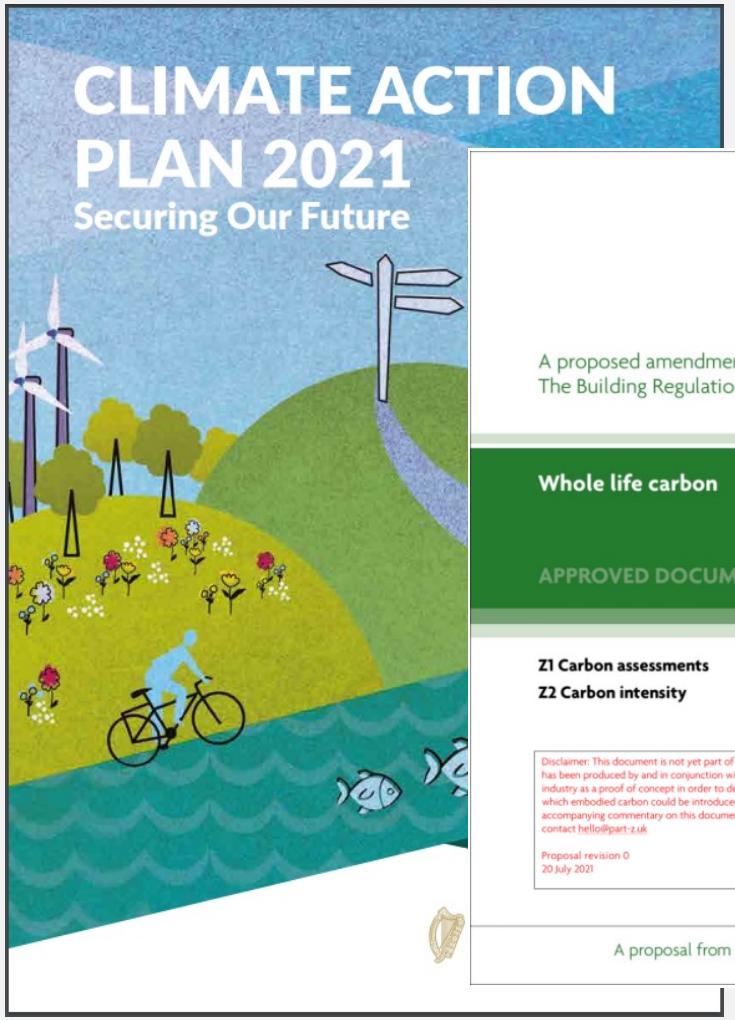

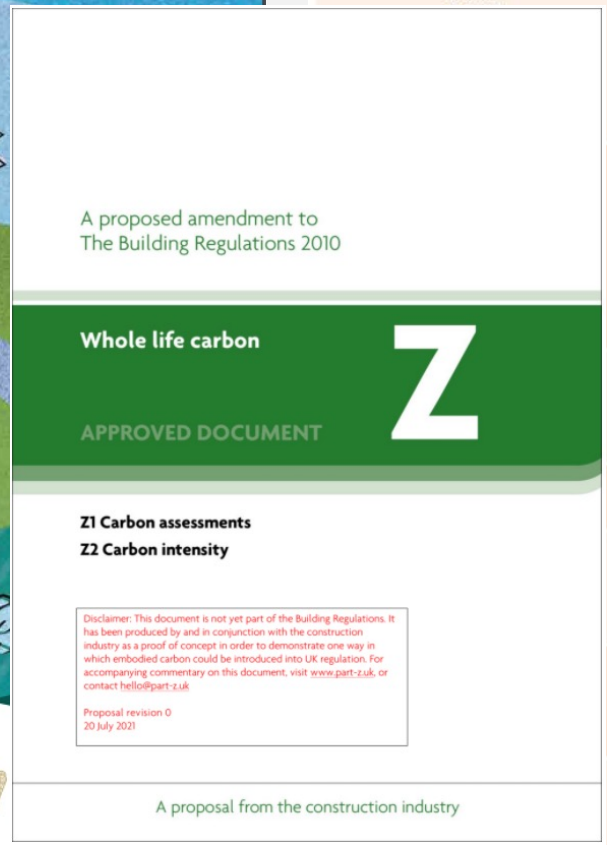

Action Number	Action
Promoting the Uptake of Low Carbon Construction	
	Support the current review by the European Commission of the Construction Products Regulation and proposed implementation of Basic Works Requirements 7+ for sustainability of construction products
	Develop a framework methodology and certification scheme for products, as an essential step towards implementing a performance-based approach on a phased basis for measuring and limiting the embodied carbon emissions of building projects and construction products
	Work with industry stakeholders to increase the use of low carbon materials, taking into account international best practice
	Develop an embodied carbon Building Rating calculation methodology
	Support the development of a tool for early design stage comparative analysis of embodied carbon in typical Irish construction typologies
	Design and construct two exemplar public sector buildings using alternative construction techniques and materials, and monitor their performance
	Pilot project to assess the adaptive re-use potential of existing traditionally built structures as residential accommodation

GREEN BUILDING CERTIFICATIONS

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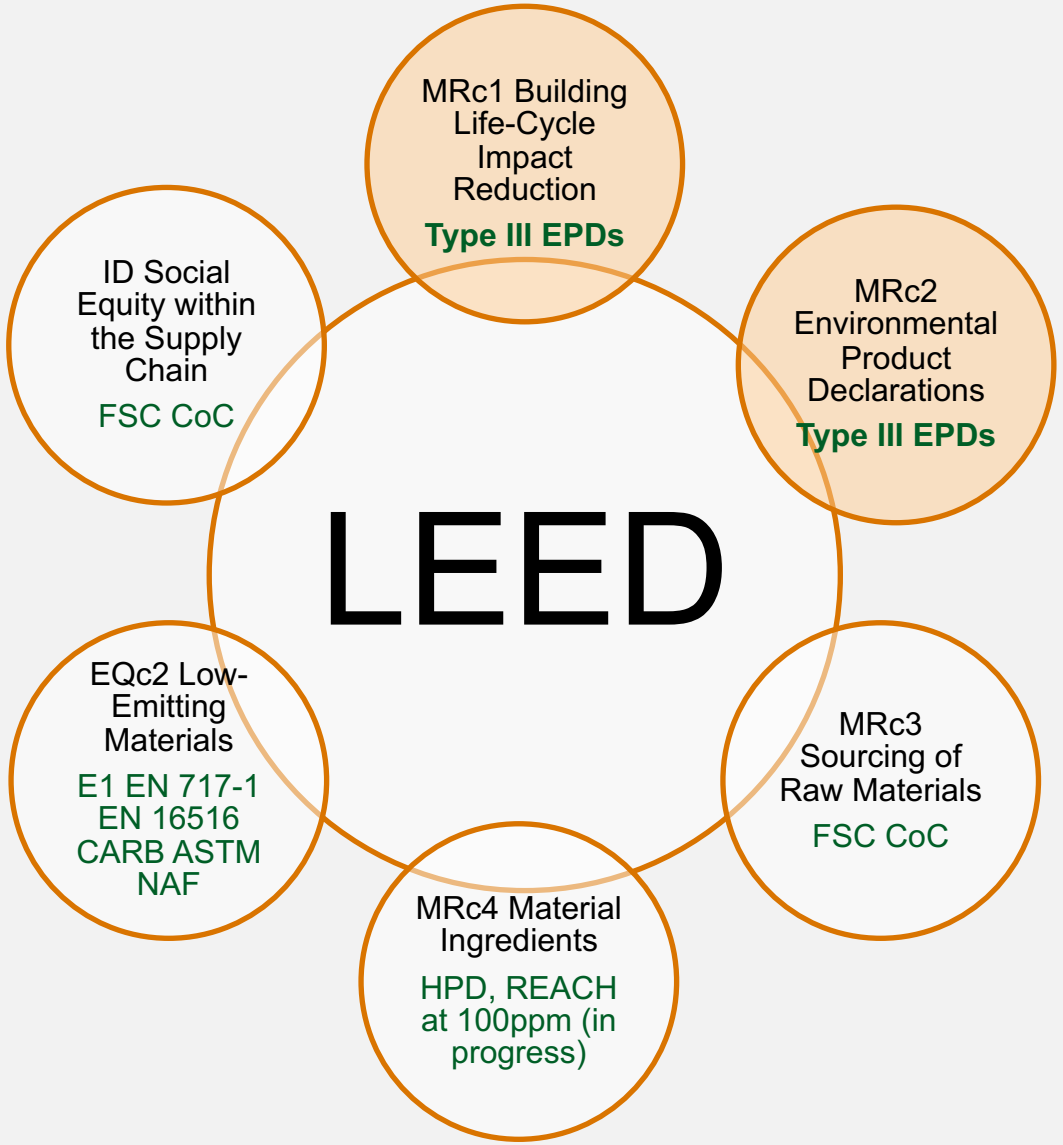

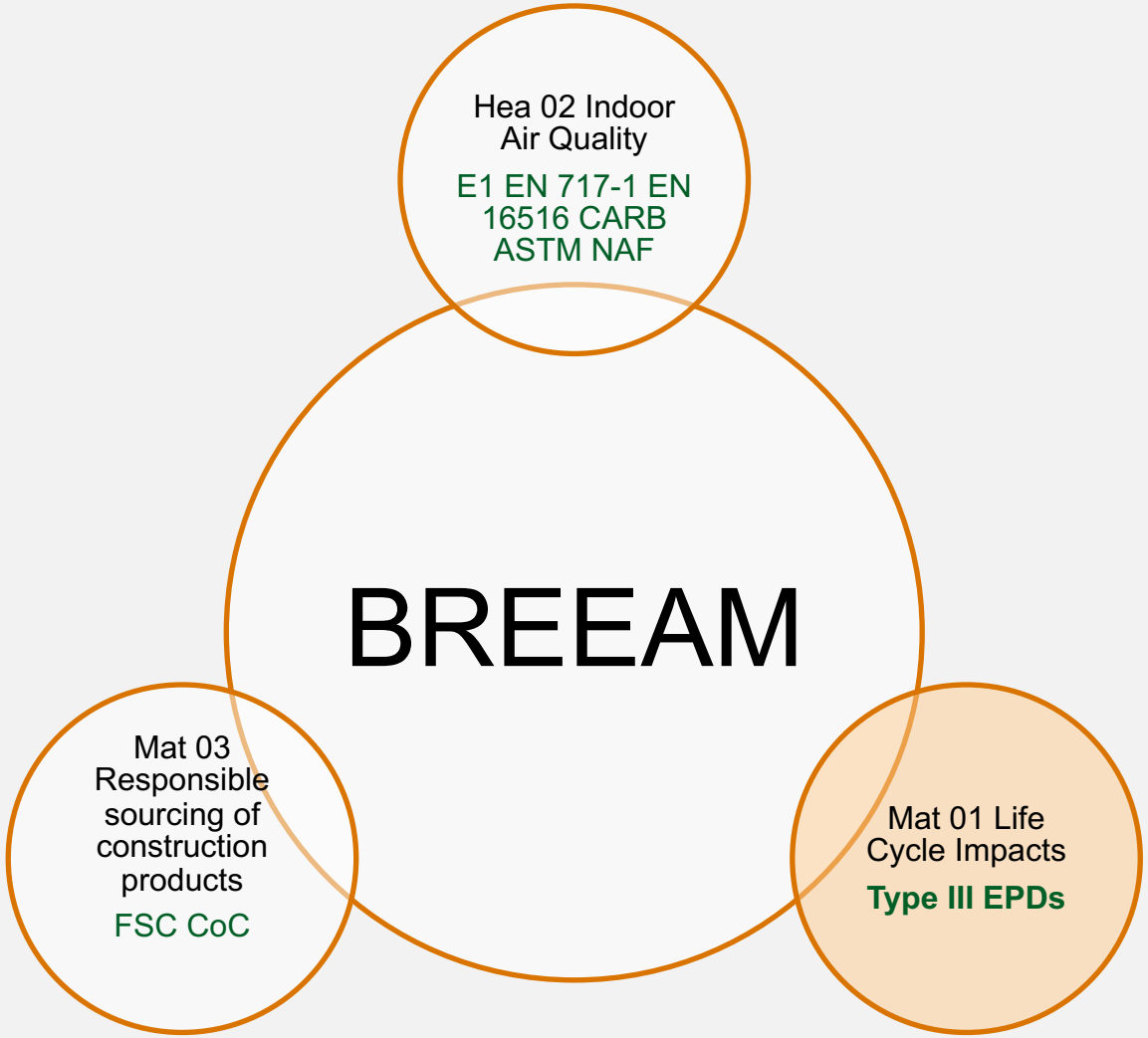

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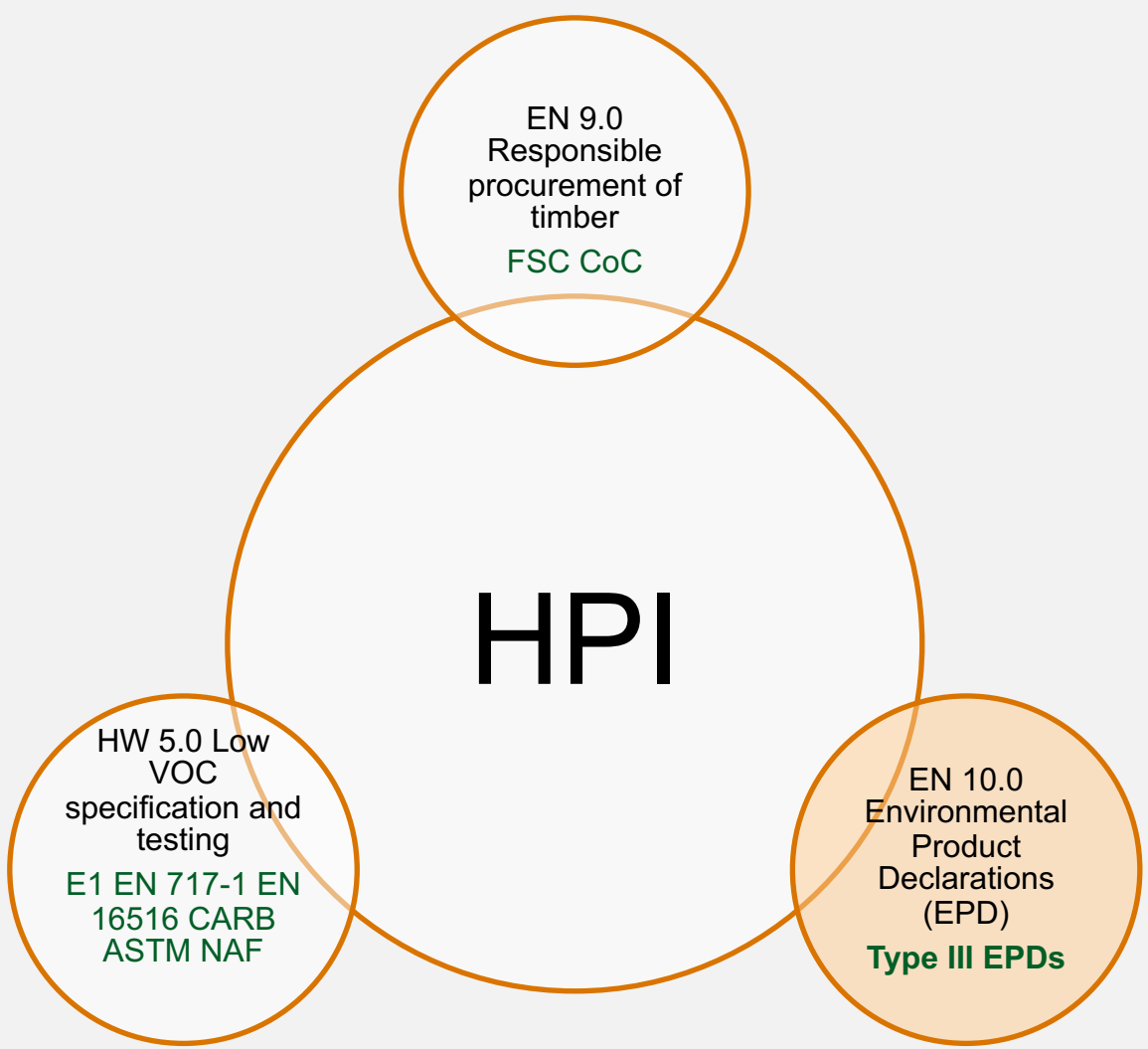

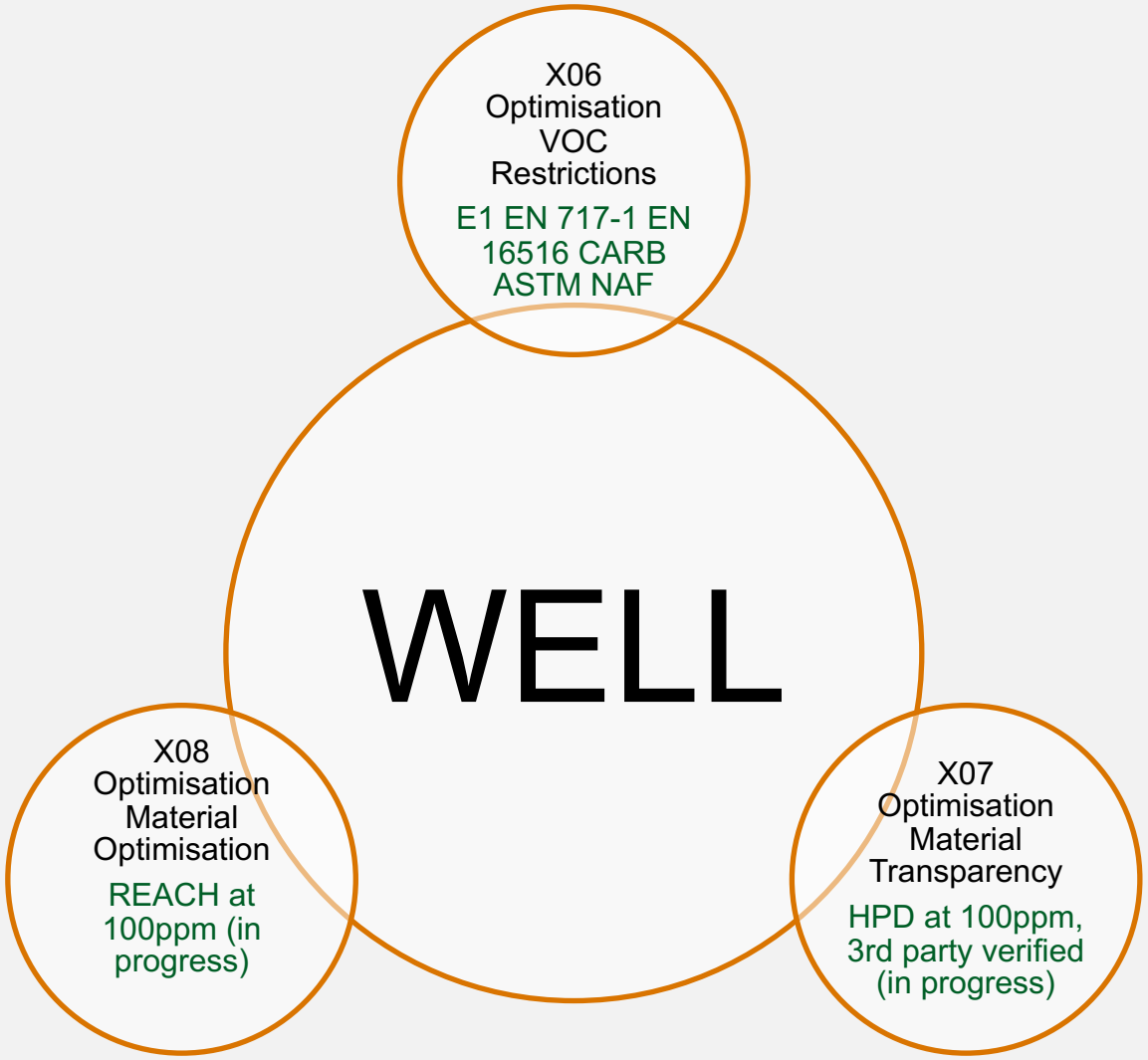

WOOD IS A CARBON NEGATIVE MATERIAL

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50% of the dry weight of wood is carbon…

Which gets stored in the products

ANNUAL CARBON STORAGE IN MDF & OSB

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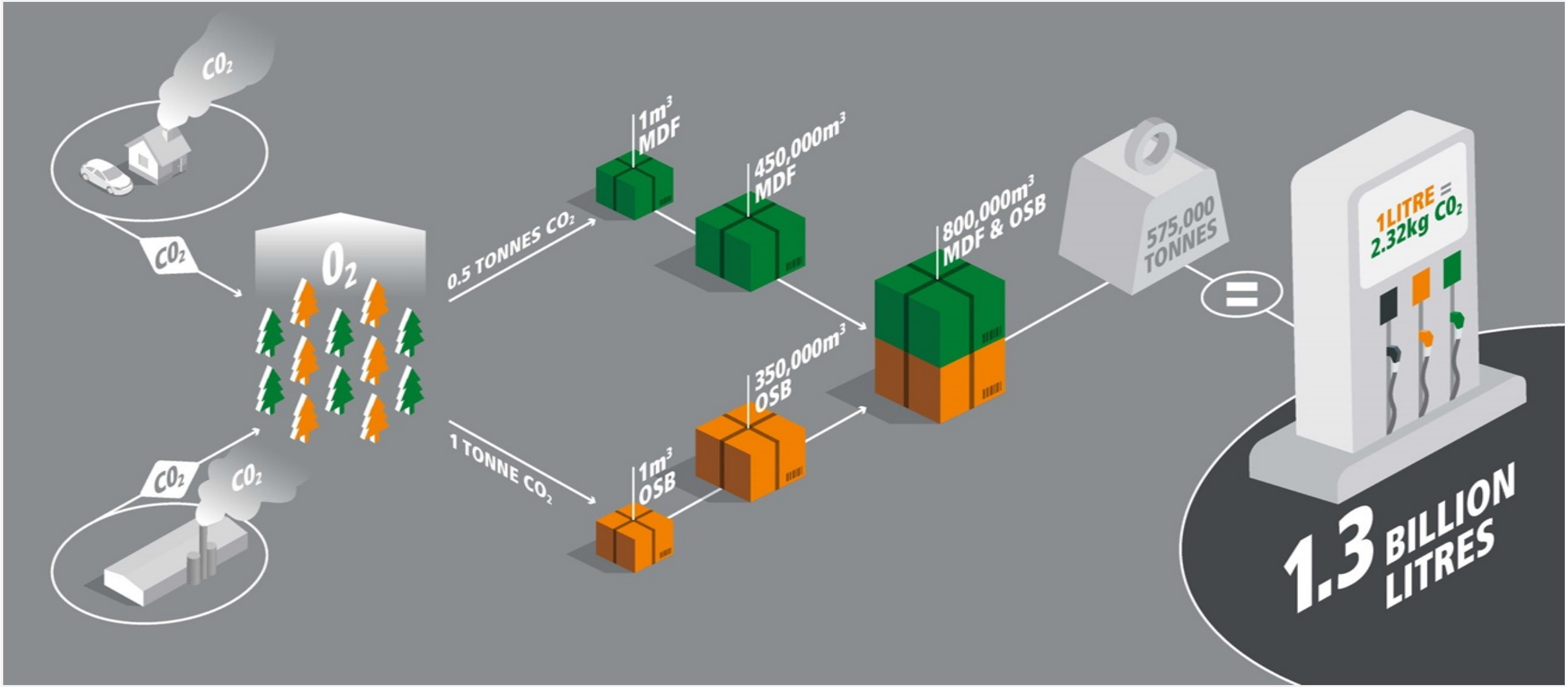

EMBODIED CARBON OF MEDITE CLEAR

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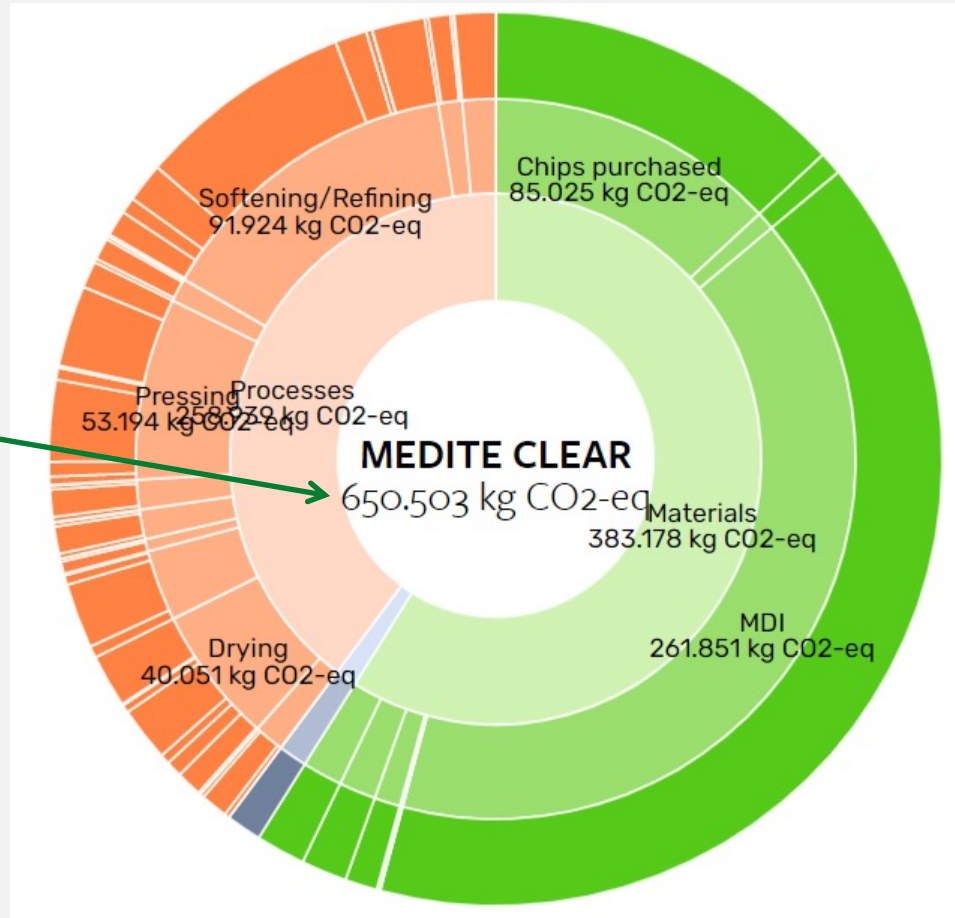
4. LCA results - MEDITE CLEAR MDF

Environmental impact per tonne

PARAMETER	UNIT	A1	A2	A3	TOTAL A1-A3
GWPf	[kg CO_2-Eq.]	3.83E+02	8.39E+00	2.58E+02	6.50E+02
GWPb	[kg CO_2-Eq.]	-1.65E+03	0.00E+00	0.00E+00	-1.65E+03
GWPt	[kg CO_2-Eq.]	-1.27E+03	8.39E+00	2.58E+02	-1.00E+03

Fossil →



The embodied carbon footprint (GWPf) is the amount of carbon (CO_2e emissions) to produce 1 tonne of MEDITE CLEAR

EMBODIED CARBON OF MEDITE CLEAR

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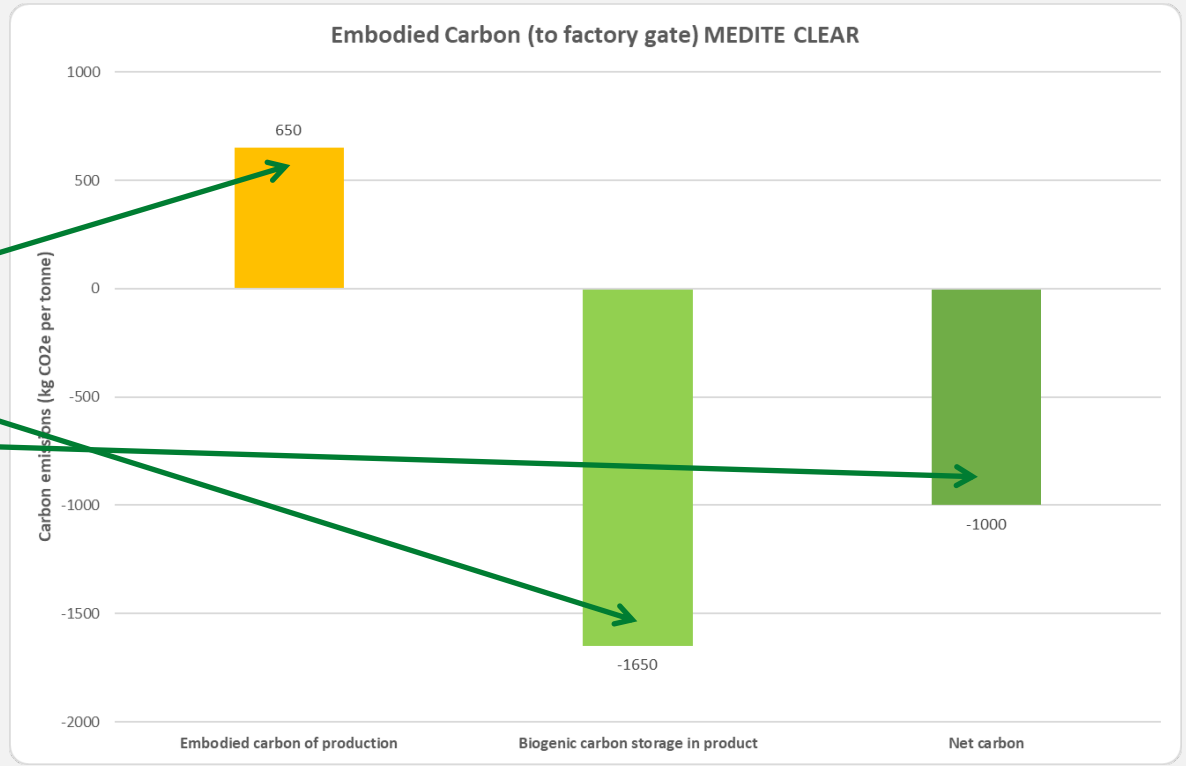
Biogenic	GWPb	[kg CO_2-Eq.]	-1.65E+03	0.00E+00	0.00E+00	-1.65E+03
Net	GWPt	[kg CO_2-Eq.]	-1.27E+03	8.39E+00	2.58E+02	-1.00E+03



- The product is **carbon negative** to factory gate (A1-A3)
- More carbon is stored in the MDF than was emitted from production processes
- Carbon is stored safely for the lifetime of the building
- **Biogenic carbon** must be reported separately to ensure comparability and prevent double counting in whole life carbon assessments
- End of life carbon release should be considered (C2-C4 declared)
- Only natural materials like wood can be carbon negative, due to biogenic (sequestered) carbon as trees grow

SOME FINAL THOUGHTS…

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- The market for green construction materials is growing.
- Greenwashing days of empty ‘Environmentally Friendly’ or ‘Eco’ claims are gone.
- Leading companies want the smallest carbon footprint.
- Health & wellbeing are becoming an equally important part of building design.
- LEAN manufacturers need reliable data on environmental impacts.
- Marketplace demands for disclosure accelerating.
- Specifiers want to understand the social and environmental impacts of their supply chain with crystal clarity, reflecting products entire life-cycle.
- Transparency is emerging as a key competitive differentiator.
- Clear communication to specifiers and clients is vital in order to break down the barriers.

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QUESTIONS

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