BUILDINGENERGY BOSTON

Less Carbon, Same Building: How Builders and Designers Can Cut Embodied Carbon Today

Ben Bogie, BPC Green Builders
Jacob Racusin, New Frameworks

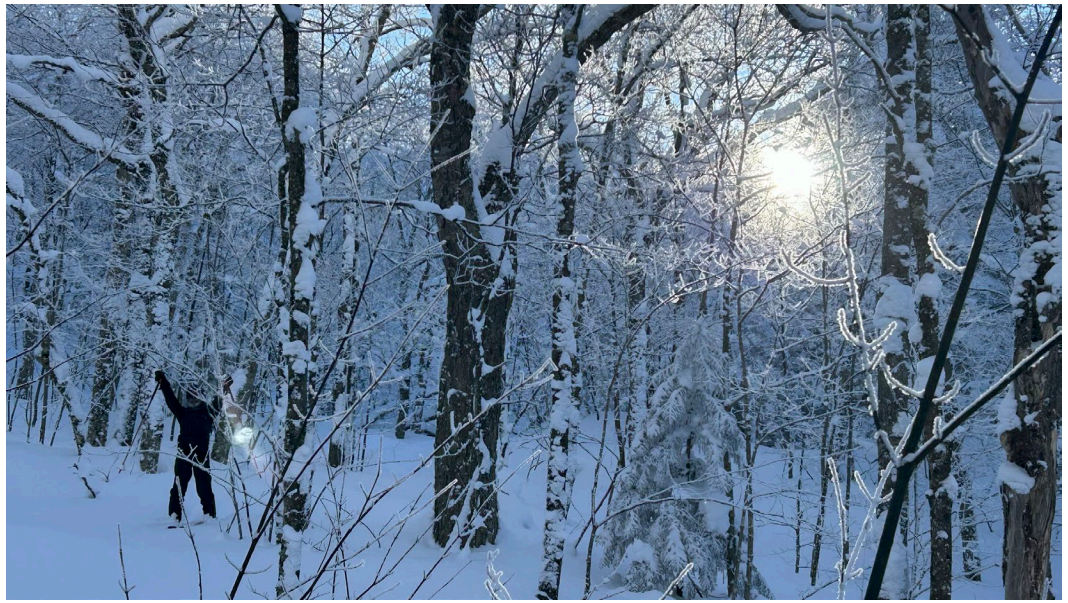
Curated by Greg Bossie

Northeast Sustainable Energy Association (NESEA) | March 24, 2026

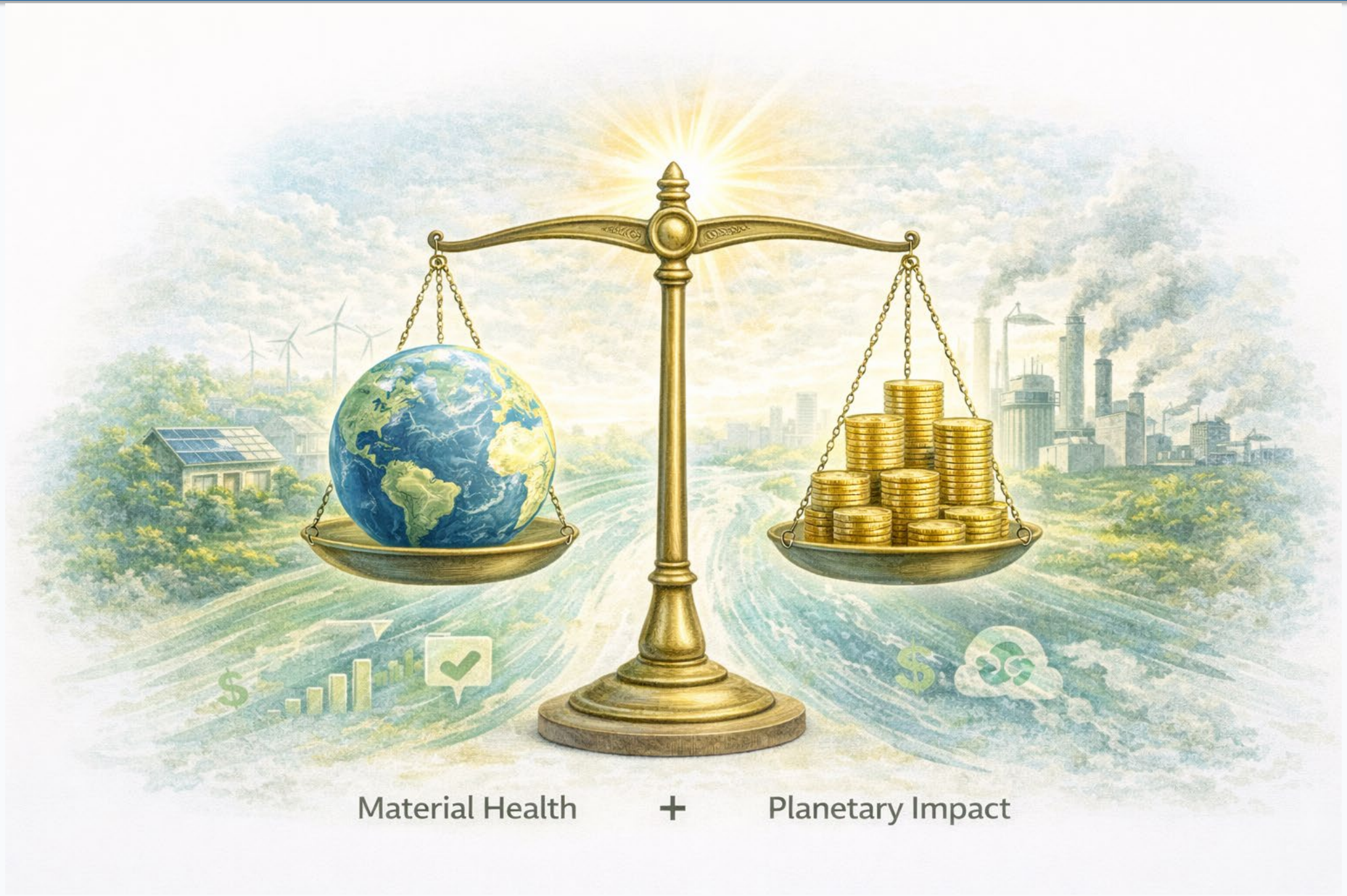
Ben Bogie — Building Performance Cooperative

Proud dad and husband
Lover of carbohydrates
3rd generation builder

Jacob Racusin —
New Frameworks / Builders for Climate Action



Family man and homesteader
Musician
Build > Design > PM > Research/Ed > Software Dev


Material Health
+
Planetary Impact

Sustainable Materials Management

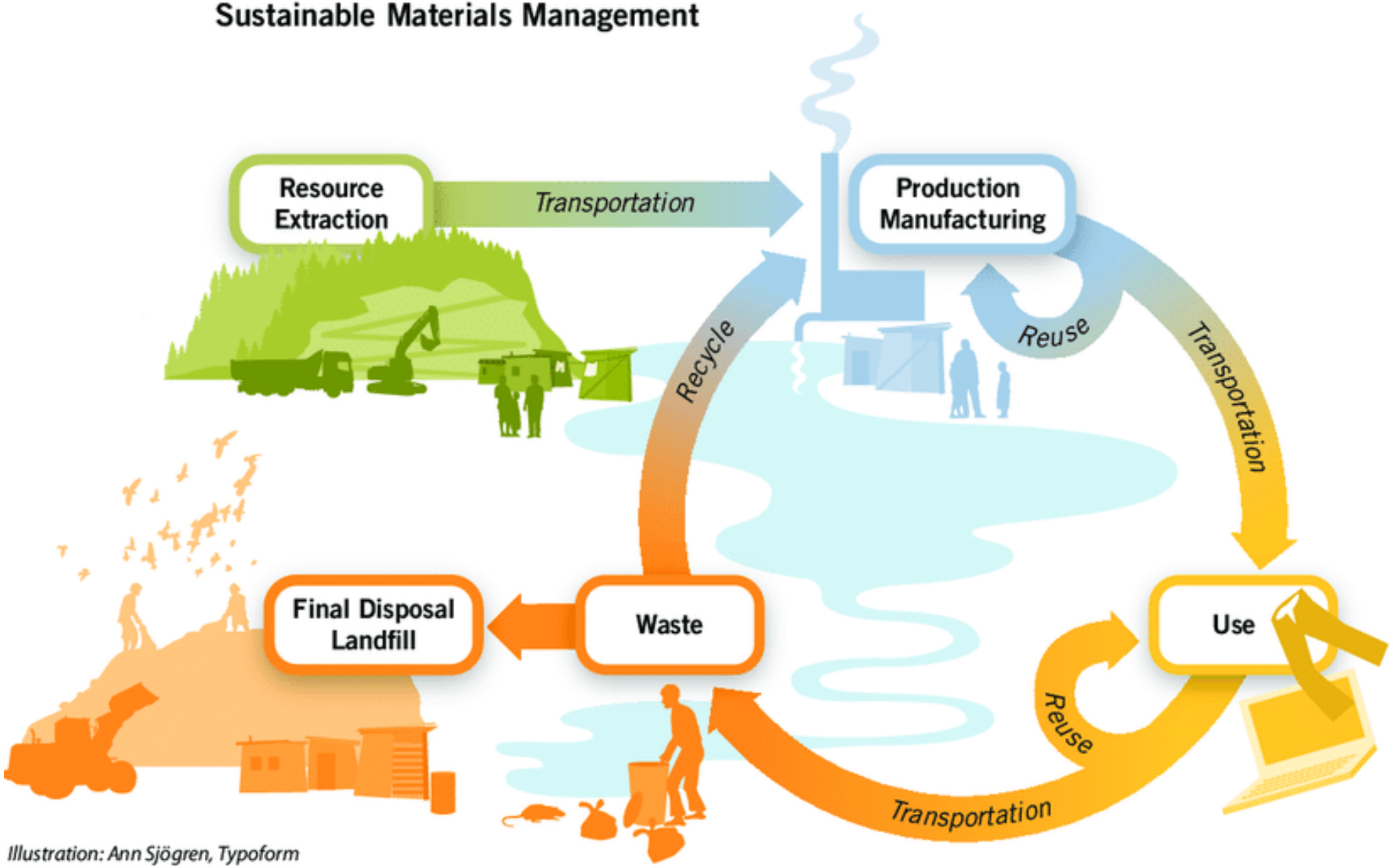
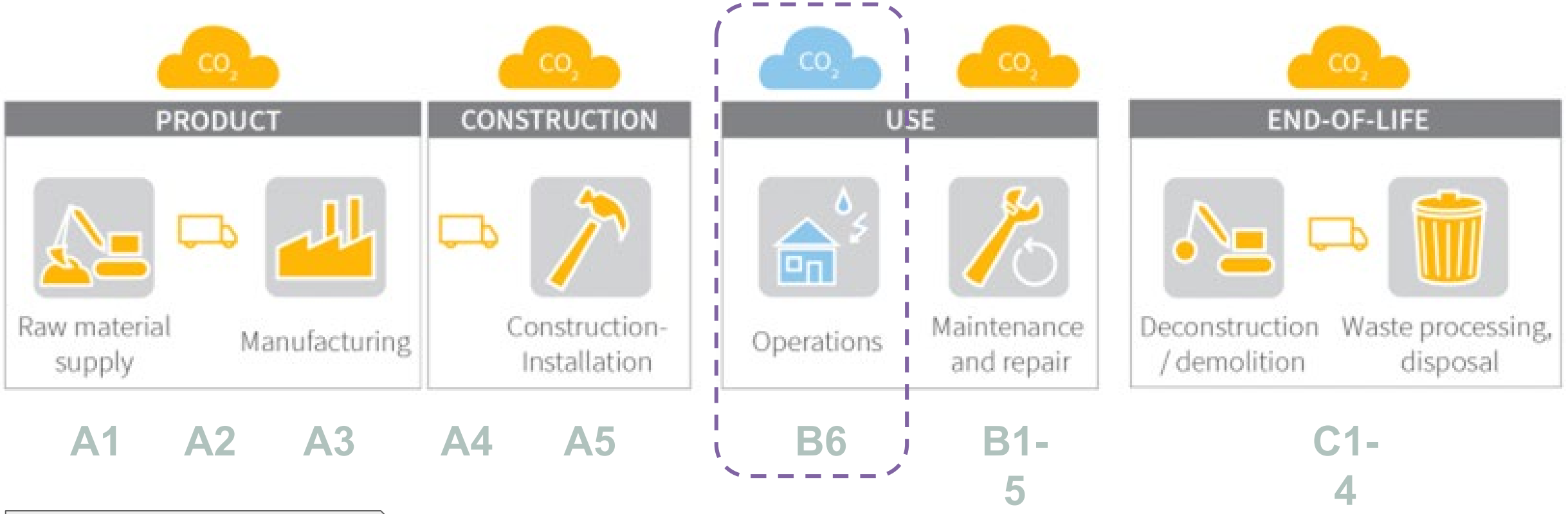


Illustration: Ann Sjögren, Typoform

Life cycle assessment phases



Material carbon emissions (MCE) (also called “Cradle-to-gate”)

Up front embodied carbon

“Cradle-to-grave” or life cycle emissions

Environmental Product Declarations

An EPD "*quantifies environmental information on the life cycle of a product to* ***enable comparisons between products fulfilling the same function***."

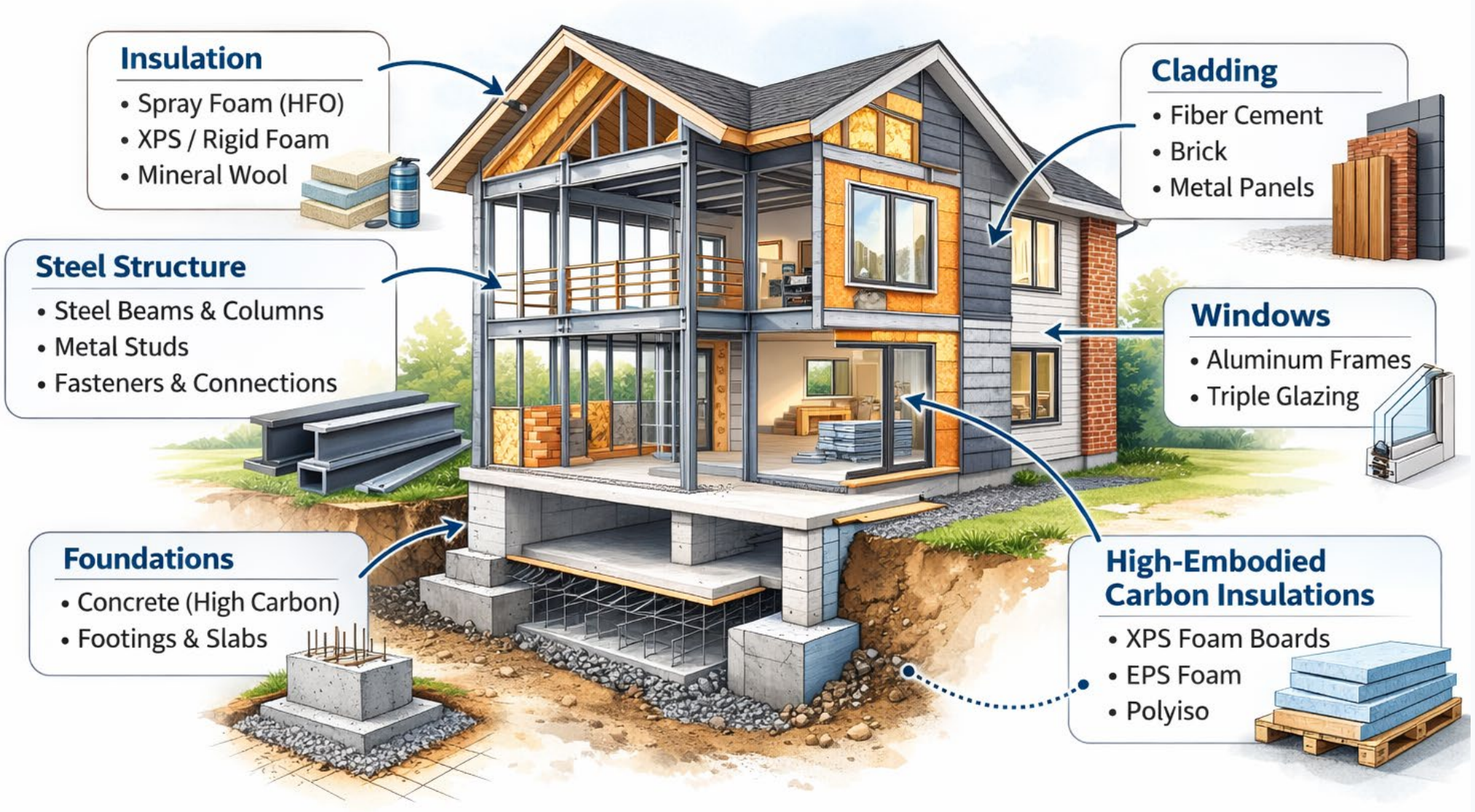
- ***Like a nutritional label for materials***
- Valid for 5 years and third party verified
- Follow standards (EN1508, ISO14040)
- GWP = kg CO_2 eq / functional unit

Product Impacts

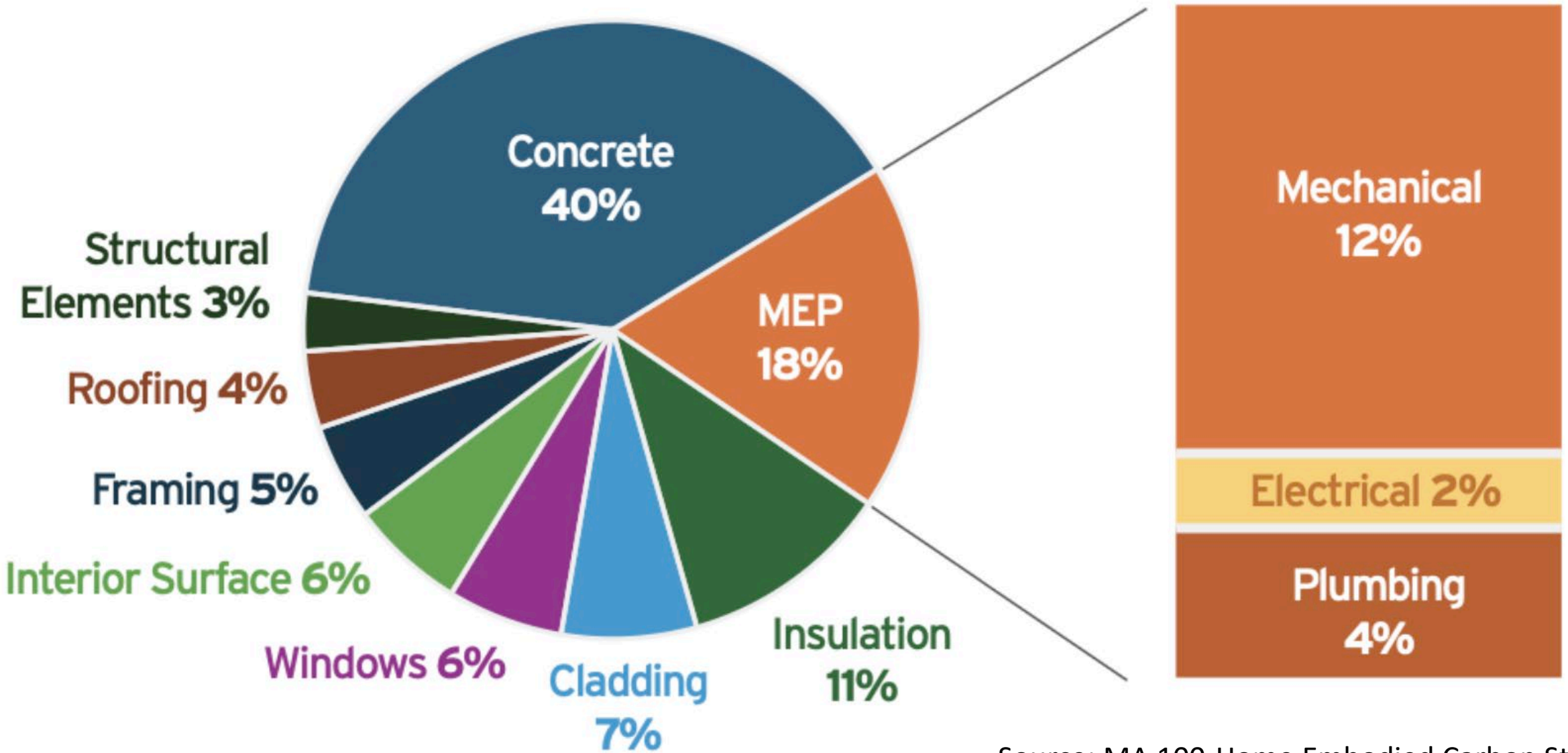
Declared Unit: 1 m^3 of 10,000 psi concrete at 28 days

Amount Per Declared Unit	
Global Warming Potential	445 $kgCO_2eq$
Emitted	460 $kgCO_2eq$
Sequestered	-15 $kgCO_2eq$
Ozone Depletion	0.000 kgCFC11eq
Acidification	2.96 $kgSO_2eq$
Eutrophication	0.09 kgNeq
Smog Formation	0.61 kgO_3eq
Primary Energy Demand	3017 MJ
Non-renewable	3000 MJ
Renewable	17 MJ

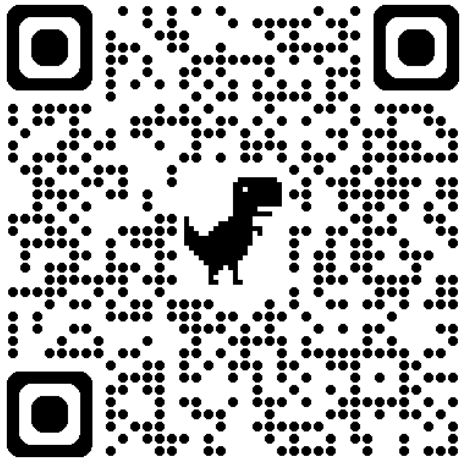
Image: Building Transparency https://www.buildingtransparency.org/resources/how-get-epd/


Insulation
• Spray Foam (HFO)
• XPS / Rigid Foam
• Mineral Wool
Cladding
• Fiber Cement
• Brick
• Metal Panels
Steel Structure
• Steel Beams & Columns
• Metal Studs
• Fasteners & Connections
Windows
• Aluminum Frames
• Triple Glazing
Foundations
• Concrete (High Carbon)
• Footings & Slabs
High-Embodied Carbon Insulations
• XPS Foam Boards
• EPS Foam
• Polyiso

Gross Material Emissions by Category (% contribution of total)



Source: MA 100-Home Embodied Carbon Study



BEAM [V1.1] – Building Emissions Accounting for Materials

File Edit View Insert Format Data Tools Extensions Help BEAM Menu

Menus 100% CA$ % .0 .00 123 12 B I

J17

Welcome

BEAM

BUILDING EMISSIONS ACCOUNTING FOR MATERIALS

Before using BEAM v1.1 you need to authorize our scripts. We assure you that our scripts are safe and are only used to run the BEAM menu functions, nothing more. Once you authorize our scripts & activate your copy, all BEAM functions will load. If you encounter any problems please see our troubleshooting guide.

Please follow this 2-step activation process:

1. Click the button below to authorize BEAM scripts (a pop-up window will appear)

AUTHORIZE SCRIPTS

2. Click the button below to Activate BEAM

ACTIVATE BEAM

Welcome to BEAM | Introduction | PROJECT | Footings & Slabs | Foundation Walls | Structural Elements

DIMENSION NAME	QTY	UNIT	DESCRIPTION
CONTINUOUS FOOTINGS VOLUME	7.4	yd³	Length (ft): 100.00 X Height (in.): 12.00 X Width (in.): 24.00 Exclude: garage
COLUMNS/PIERS & PADS VOLUME	10.0	yd³	Total volume of discontinuous foundation elements Includes: pads/footings, columns/piers/piles Excludes: garage
FOUNDATION WALL AREA	1000.0	ft²	Total foundation wall surface area (centerline length x height) Includes: basement, party walls. Excludes: openings, garage foundation
FOUNDATION SLAB/FLOOR AREA	1000.0	ft²	Total foundation slab surface area Excludes: garage slab
EXTERIOR WALL AREA	1000.0	ft²	Surface area of exterior walls. Includes: gable ends. Excludes: window & door openings, party walls, garage walls
WINDOW AREA	1000.0	ft²	Area of window frames (preferrable) or rough openings Includes: full glazing area, skylights. Excludes: garage windows
PARTY WALL AREA	1000.0	ft²	Wall area that partitions this unit from others Typical for townhouses & apartment units
INTERIOR WALL AREA	1000.0	ft²	One side only (i.e. centerline) of all interior walls. Includes: interior door area. Excludes: exterior, garage partition and party walls
FRAMED FLOOR AREA	1000.0	ft²	Above grade flooring area Excludes: basement floor slab, and floor openings
FINISHED CEILING AREA	1000.0	ft²	Total finished ceiling area Includes: basement ceilings. Excludes: garage ceilings
ROOF CAVITY INSULATION AREA	1000.0	ft²	Total area of roof insulation
ROOF SURFACE AREA	1000.0	ft²	Total roof surface area. Includes: overhangs
TIMBER FRAMING VOLUME	0.0	yd³	Total volume of wood in heavy timber posts & beams Separate inputs for steel found in Structural Elements section

EXTERIOR WALLS

PROJECT NAME: Sample Project DOE Prototype
SCENARIO: Baseline
BEAM VERSION: V1.1

SECTION COMPLETE? ☐

						938	938	0
CATEGORY	MATERIAL	QUANTITY	UNITS	%	SELECT	NET EMISSIONS kg CO_2e	GROSS EMISSIONS kg CO_2e	STORAGE Short Cycle kg CO_2
	Spray polyurethane foam - High Density (HFC gas) / R 6.3-inch / SPFA [Industry Avg | US & CA]	**1,000.0** ft²	100%	☐		**5,570**	5,570	0
	Spray polyurethane foam - High Density (HFO gas) / R 6.5-inch / SPFA [Industry Avg | US & CA]	**1,000.0** ft²	100%	☐		**1,325**	1,325	0
	Spray polyurethane foam - High Density (HFC gas) / Carlisle CSFI / PremiSEAL / R 6.5-inch	**1,000.0** ft²	100%	☐		**4,251**	4,251	0
	Spray polyurethane foam - High Density (HFO gas) / Carlisle CSFI / PremiR + EVO / R 6.5-inch	**1,000.0** ft²	100%	☐		**1,453**	1,453	0
SPRAY POLYURETHANE FOAM – CLOSED CELL								
	Spray polyurethane foam - Closed Cell (HFC gas) / R 6.6-inch / SPFA [Industry Avg | US & CA]	**1,000.0** ft²	100%	☐		**4,306**	4,306	0
	Spray polyurethane foam - Closed Cell (HFO gas) / R 6.6-inch / SPFA [Industry Avg | US & CA]	**1,000.0** ft²	100%	☐		**1,136**	1,136	0
	Spray polyurethane foam - Closed Cell (HFC gas) / Carlisle CSFI / SealTite PRO Closed Cell (HFC) / R 7.0-inch	**1,000.0** ft²	100%	☐		**2,948**	2,948	0
	Spray polyurethane foam - Closed Cell (HFO gas) / Carlisle CSFI / SealTite PRO HFO, SealTite One / R 7.0-inch	**1,000.0** ft²	100%	☐		**874**	874	0
	Spray polyurethane foam - Closed Cell (HFO gas) / Huntsman / Heatlok Soya HFO & Heatlok HFO / R 6.5-inch	**1,000.0** ft²	100%	☐		**819**	819	0
SPRAY POLYURETHANE FOAM – OPEN CELL								
	Spray polyurethane foam - Open Cell / R 4.1-inch / SPFA [Industry Avg | US & CA]	**1,000.0** ft²	100%	☐		**465**	465	0
	Spray polyurethane foam - Open Cell / Carlisle CSFI / SealTite PRO Open Cell, SealTite PRO High Yield, SealTite PRO No Mix, SealTite PRO OCX / R 3.7-inch	**1,000.0** ft²	100%	☐		**367**	367	0
CEMENTITIOUS FOAM INSULATION								
	Cementitious Foam / R 3.5-inch [BEAM Avg]	**1,000.0** ft²	100%	☐		**521**	521	0

EXTERIOR WALLS

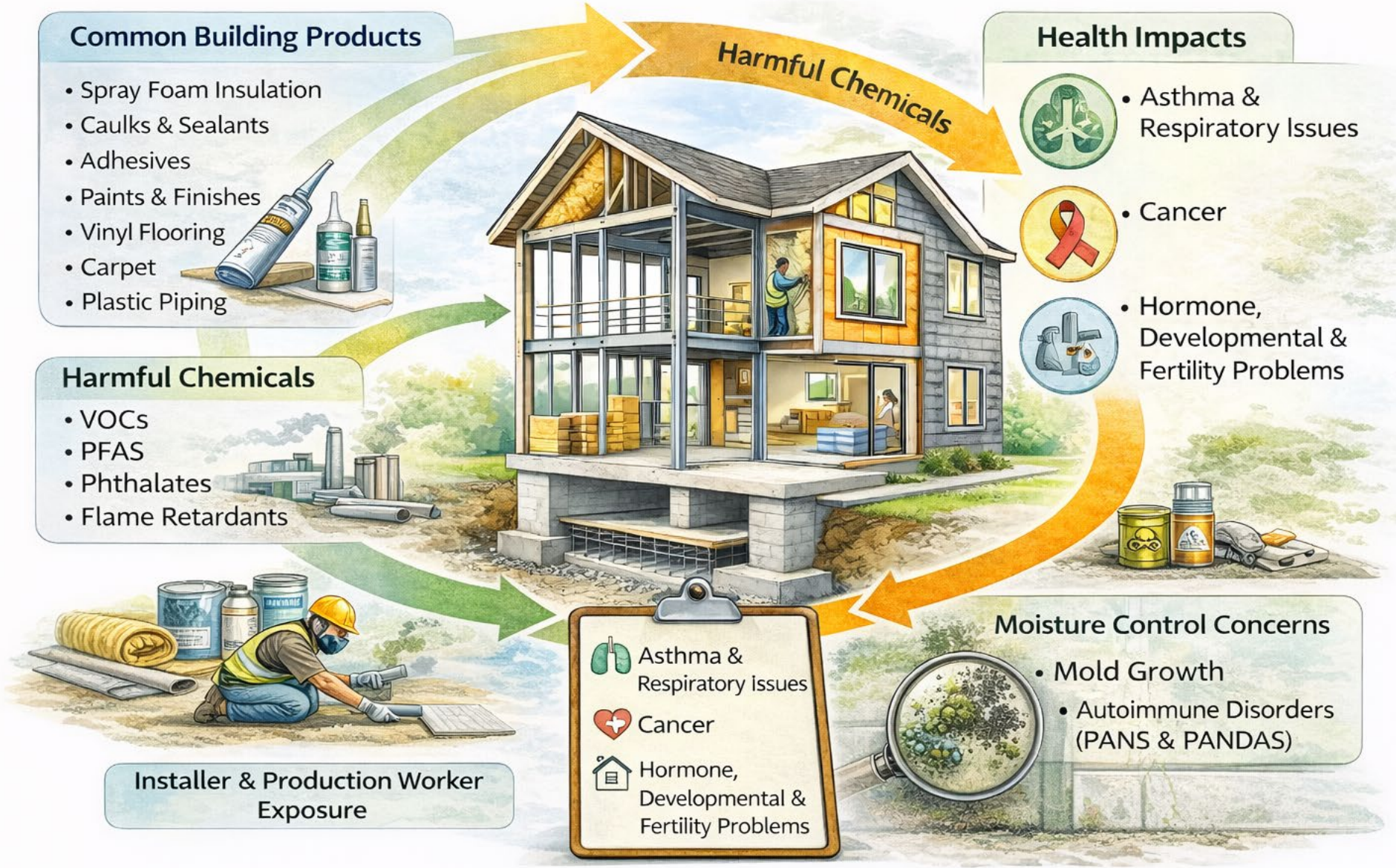
PROJECT NAME: Sample Project DOE Prototype
SCENARIO: Baseline
BEAM VERSION: V1.1

SECTION COMPLETE? ☐

						938	938	0
CATEGORY	MATERIAL	QUANTITY	UNITS	%	SELECT	NET EMISSIONS kg CO_2e	GROSS EMISSIONS kg CO_2e	STORAGE Short Cycle kg CO_2
CELLULOSE INSULATION								
	Cellulose / dense pack / CIMA / R 3.7-inch / [Industry Avg | US & CA]	1,000.0	ft²	100%	☐	-648	366	1,014
	Cellulose / dense pack / Advanced Fiber Technology / AFT Carbon Smart / 56 kg/m3 / R3.8-inch	1,000.0	ft²	100%	☐	-705	283	988
	Cellulose / dense pack / Greenfiber / Sanctuary / Avg of all facilties / 56.1 kg/m3 / R3.8-inch	1,000.0	ft²	100%	☐	-731	255	986
	Cellulose / batt / CMS / EcoCell / R 3.6-inch	1,000.0	ft²	100%	☐	-509	234	743
	Cellulose / batt / Ekovilla / Ekovilla Slab / R3.7-inch [EU]	1,000.0	ft²	100%	☐	-117	445	563
	Cellulose / loose fill / CIMA / R 3.7-inch / [Industry Avg | US & CA]	1,000.0	ft²	100%	☐	-282	159	442
	Cellulose / loose fill / Advanced Fiber Technology / AFT Carbon Smart / 25.2 kg/m3 / R3.8-inch	1,000.0	ft²	100%	☐	-317	127	445
	Cellulose / loose fill / Greenfiber / Sanctuary / Avg of all facilties / 17.1 kg/m3 / R3.8-inch	1,000.0	ft²	100%	☐	-223	78	300
	Cellulose / spray applied / International Cellulose Corp. / K-13, ThermoCon / R 3.75-inch	1,000.0	ft²	100%	☐	-688	106	794
WOOD FIBER INSULATION								
	Wood fiber batt / [BEAM Avg | EU]	1,000.0	ft²	100%	☐	-527	388	915
	Wood fiber loose fill / GUTEX / ThermoFiber / R 3.8-inch [EU]	1,000.0	ft²	100%	☐	-295	424	719
	Wood fiber batt / Steico / SteicoFlex / R 3.8-inch [EU]	1,000.0	ft²	100%	☐	-351	653	1,004
	Wood fiber batt / GUTEX / ThermoFlex / R 4-inch [EU]	1,000.0	ft²	100%	☐	-703	123	826

SPRAY POLYURETHANE FOAM – CLOSED CELL						
	Spray polyurethane foam - Closed Cell (HFC gas) / R 6.6-inch / SPFA [Industry Avg | US & CA]	1,000.0 ft²	100%	☐	1,077	1,077
	Spray polyurethane foam - Closed Cell (HFO gas) / R 6.6-inch / SPFA [Industry Avg | US & CA]	1,000.0 ft²	100%	☐	284	284
	Spray polyurethane foam - Closed Cell (HFC gas) / Carlisle CSFI / SealTite PRO Closed Cell (HFC) / R 7.0-inch	1,000.0 ft²	100%	☐	737	737
	Spray polyurethane foam - Closed Cell (HFO gas) / Carlisle CSFI / SealTite PRO HFO, SealTite One / R 7.0-inch	1,000.0 ft²	100%	☐	218	218
	Spray polyurethane foam - Closed Cell (HFO gas) / Huntsman / Heatlok Soya HFO & Heatlok HFO / R 6.5-inch	1,000.0 ft²	100%	☐	205	205
MINERAL WOOL BOARD						
	Mineral wool board - heavy density / NAIMA / R 4.4-inch [Industry Avg | N.America]	1,000.0 ft²	100%	☐	558	558
	Mineral wool board / Rockwool / Comfortboard 80 / R 4.2-inch	1,000.0 ft²	100%	☐	332	332
	Mineral wool board / Owens Corning / Thermafiber RainBarrier ci 80 (Plant Avg) / R 4.2-inch	1,000.0 ft²	100%	☐	310	310
	Mineral wool board - light density / NAIMA / R 3.9-inch [Industry Avg | N.America]	1,000.0 ft²	100%	☐	219	219
	Mineral wool board / Owens Corning / Thermafiber RainBarrier HD (Plant Avg) / R 4.3-inch	1,000.0 ft²	100%	☐	263	263
	Mineral wool board / Rockwool / Cavityrock / R 4.3-inch	1,000.0 ft²	100%	☐	172	172
HIGH R-VALUE CONTINUOUS INSULATION						
	Vacuum Insulated Panel / Porextherm / Vacupor / Fumed silica core / R 30/inch [EU]	1,000.0 ft²	100%	☐	608	608
EPS FOAM BOARD						
	EPS foam board / Type XV / R 4.3-inch, 60 psi / EPS Industry Alliance [Industry Avg | US & CA]	1,000.0 ft²	100%	☐	576	576
	EPS foam board / Type IX / R 4.2-inch, 25 psi / EPS Industry Alliance [Industry Avg | US & CA]	1,000.0 ft²	100%	☐	354	354
	EPS foam board / Type II / R 4.0-inch, 15 psi / EPS Industry Alliance [Industry Avg | US & CA]	1,000.0 ft²	100%	☐	281	281
	EPS foam board / Type I / R 3.6-inch, 10 psi / EPS Industry Alliance [Industry Avg | US & CA]	1,000.0 ft²	100%	☐	207	207
EPS FOAM BOARD WITH GRAPHITE						
	EPS foam board with graphite / BASF / Neopor F 5200 & F 5300 Plus BMB / R 4.7-inch, Type IX, 25 psi (Type 9, 175 kPa)	1,000.0 ft²	100%	☐	252	252
	EPS foam board with graphite / BASF / Neopor F 5200 Plus / R 4.7-inch, Type IX, 25 psi	1,000.0 ft²	100%	☐	241	241
	EPS foam board with graphite / BASF / Neopor F 5200 & F 5300 Plus BMB / R 4.7-inch, Type II, 15 psi (Type 2, 110 kPa)	1,000.0 ft²	100%	☐	189	189
	EPS foam board with graphite / BASF / Neopor F 5200 Plus / R 4.7-inch, Type II, 15 psi (Type 2, 110 kPa)	1,000.0 ft²	100%	☐	186	186

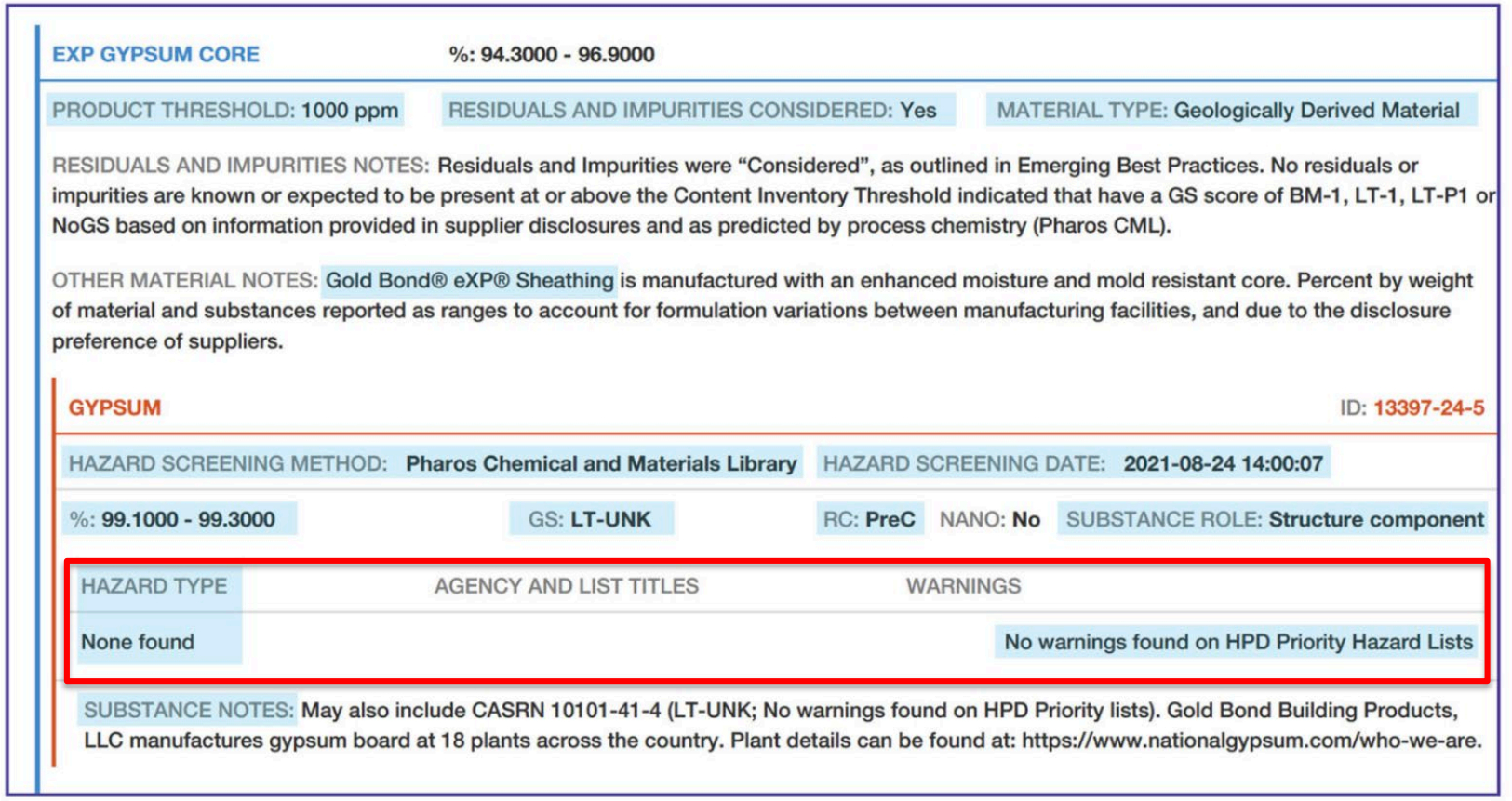
Health Impacts of Common Building Materials



Health Product Declarations

An HPD is used to disclose chemical substances in a product along with potential health impacts.

- Disclose chemicals
- Identified health hazards
- Compliance certification
- Data sourcing



EXP GYPSUM CORE %: 94.3000 - 96.9000

PRODUCT THRESHOLD: 1000 ppm | RESIDUALS AND IMPURITIES CONSIDERED: Yes | MATERIAL TYPE: Geologically Derived Material

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities were "Considered", as outlined in Emerging Best Practices. No residuals or impurities are known or expected to be present at or above the Content Inventory Threshold indicated that have a GS score of BM-1, LT-1, LT-P1 or NoGS based on information provided in supplier disclosures and as predicted by process chemistry (Pharos CML).

OTHER MATERIAL NOTES: Gold Bond® eXP® Sheathing is manufactured with an enhanced moisture and mold resistant core. Percent by weight of material and substances reported as ranges to account for formulation variations between manufacturing facilities, and due to the disclosure preference of suppliers.

GYPSUM ID: 13397-24-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library | HAZARD SCREENING DATE: 2021-08-24 14:00:07

%: 99.1000 - 99.3000 | GS: LT-UNK | RC: PreC | NANO: No | SUBSTANCE ROLE: Structure component

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: May also include CASRN 10101-41-4 (LT-UNK; No warnings found on HPD Priority lists). Gold Bond Building Products, LLC manufactures gypsum board at 18 plants across the country. Plant details can be found at: https://www.nationalgypsum.com/who-we-are.

Source: Green Badger, https://getgreenbadger.com/health-product-declaration-examples/

informed.habitablefuture.org

Product Guidance

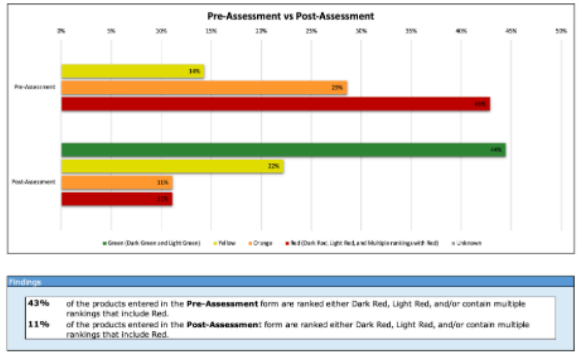
The Product Guidance pages will help you learn at your own pace. Our deep research is translated into simple guidance to build your competency about healthier materials.

- Blown-In Wood Fiber (Loose Fill and Dense Pack)
- Unfaced Fiberglass Batts
- Cellulose/Cotton Batts
- Halogen-Free Polyisocyanurate Boards
- Extruded Polystyrene (XPS) Boards
- Spray Polyurethane Foam (SPF)

GET STARTED

Benchmarking Tools

Informed benchmarking tools empower project teams to identify healthier materials and satisfy requirements of green building standards by eliminating products ranked red while prioritizing safer yellow and green alternatives.



GET STARTED

Informed™ Product Guidance

Build your knowledge of healthier products by digging into our research, translated into easy to understand guidance.

The intuitive red-to-green color ranking compiles decades of comprehensive research about the health impacts of chemicals on building occupants, fenceline communities, and workers throughout the product life cycle.

Step up from red — a critical first move. Next, prefer product types ranked yellow and green.

- Best in Class
- Better
- Good
- Reduce
- Eliminate
- Worst in Class

UPDATED

Flooring

Paint

Drywall

UPDATED

Countertops

Cabinetry & Millwork

Doors

Insulation

Flooring Installation

Sealants

Turf

Water Pipes

Roofing

- Bentonite Sheet Waterproofing
- Crystalline/Capillary Concrete Waterproofing
- Non-PVC Thermoplastic Sheet Waterproofing (FPO/TPO/HDPE/PP)
- Polyvinyl Chloride (PVC) or KEE Thermoplastic Sheet Waterproofing
- Cold-Applied Emulsified Asphalt/Bituminous Dampproofing
- Solvent-Based Asphalt/Bituminous Dampproofing
- Self-Adhering Rubberized Asphalt Sheet Waterproofing
- Cold Fluid-Applied PMMA Waterproofing
- One-Part Polyurethane Cold Fluid-Applied Waterproofing
- Hot-Applied Rubberized Asphalt Waterproofing

Supporting Information

Unless otherwise noted, product content and health hazard information is based on research done by Habitable for Common Product profiles, reports, and blogs. Links to the appropriate resources are provided.

Bentonite Sheet Waterproofing

Crystalline/Capillary Concrete Waterproofing

Non-PVC Thermoplastic Sheet Waterproofing (FPO/TPO/HDPE/PP)

Polyvinyl Chloride (PVC) or KEE Thermoplastic Sheet Waterproofing

Cold-Applied Emulsified Asphalt/Bituminous Dampproofing

In general, it is best to avoid asphalt-based products whenever possible. Particular chemicals of concern in asphalt are polycyclic aromatic hydrocarbons (PAHs), which are known carcinogens. Cold-applied asphalt emulsions generally use less asphalt than other asphalt-based products and typically do not contain solvents. They can, however, contain potassium dichromate, a hexavalent chromium compound, which is a known carcinogen and has many other associated health hazards. Some substrates also require asphalt primers to be used, which can introduce additional hazardous chemicals during installation. In addition, asphalt production releases hazardous chemicals including PAHs into the air, which can affect workers and people living in nearby communities.[17]

Solvent-Based Asphalt/Bituminous Dampproofing

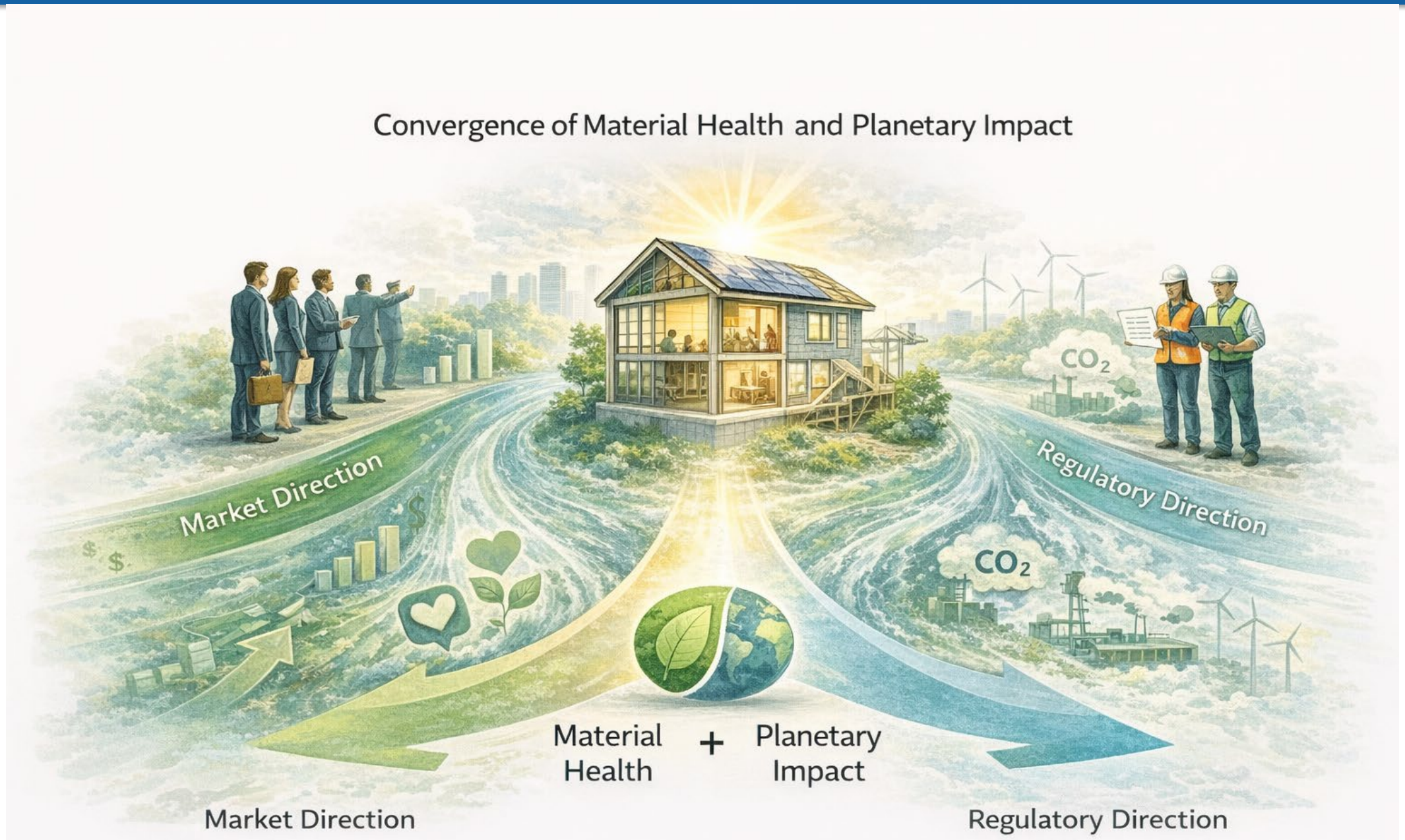
Self-Adhering Rubberized Asphalt Sheet Waterproofing

Cold Fluid-Applied PMMA Waterproofing

One-Part Polyurethane Cold Fluid-Applied Waterproofing

Hot-Applied Rubberized Asphalt Waterproofing

Green Building & Healthy Material Experts: A Smart Business Opportunity


Convergence of Material Health and Planetary Impact
Market Direction
Regulatory Direction
$
$
$
CO2
CO2
Material Health
+
Planetary Impact
Market Direction
Regulatory Direction

Material carbon emissions Case study

Building Type: Single Detached House with Garage

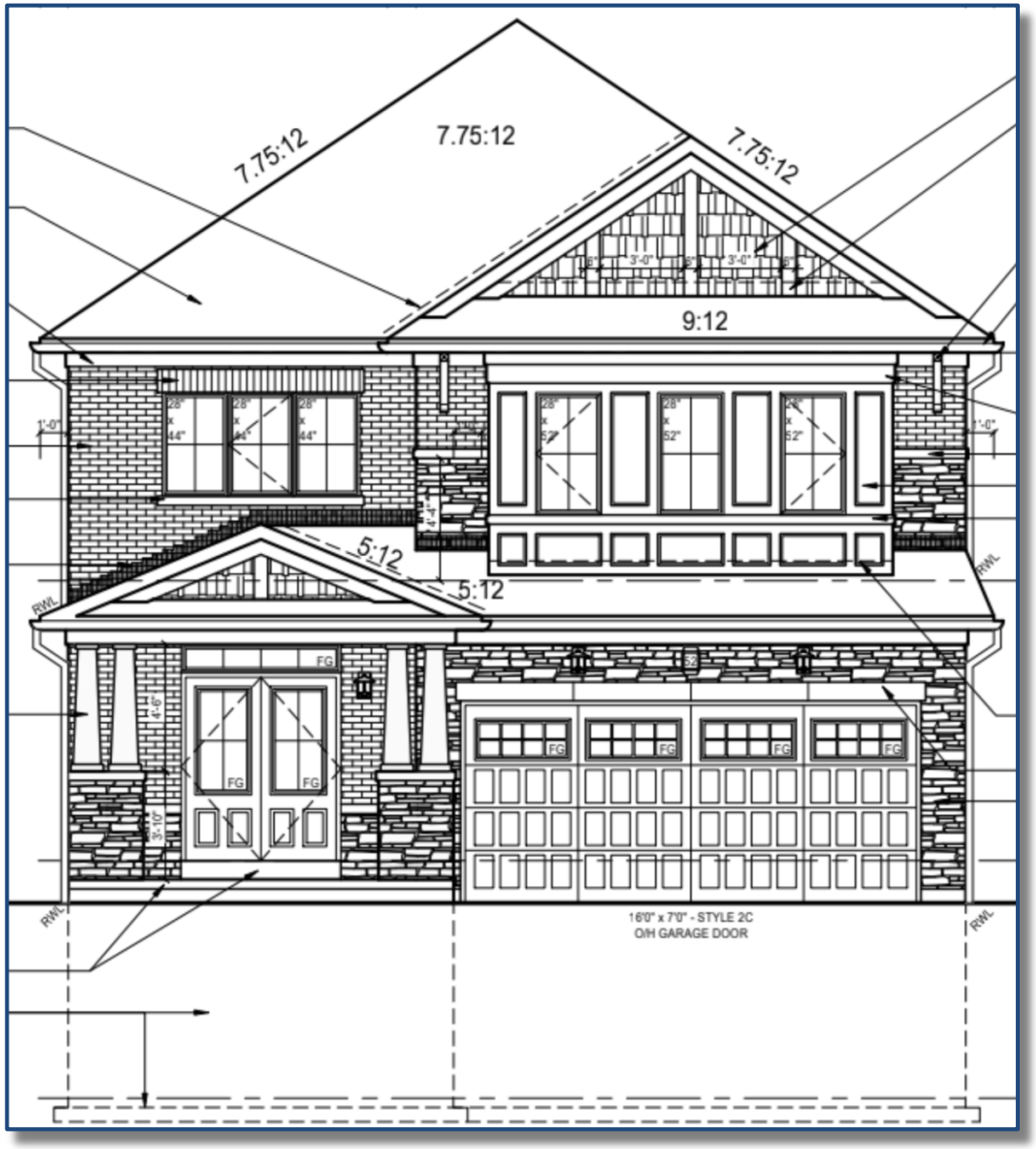
Number of Bedrooms : 4

Stories Above Grade : 2

Conditioned Area: 269 m²

Code compliant

What is the Material Carbon impact of moving from Code compliant to Net-Zero energy ?

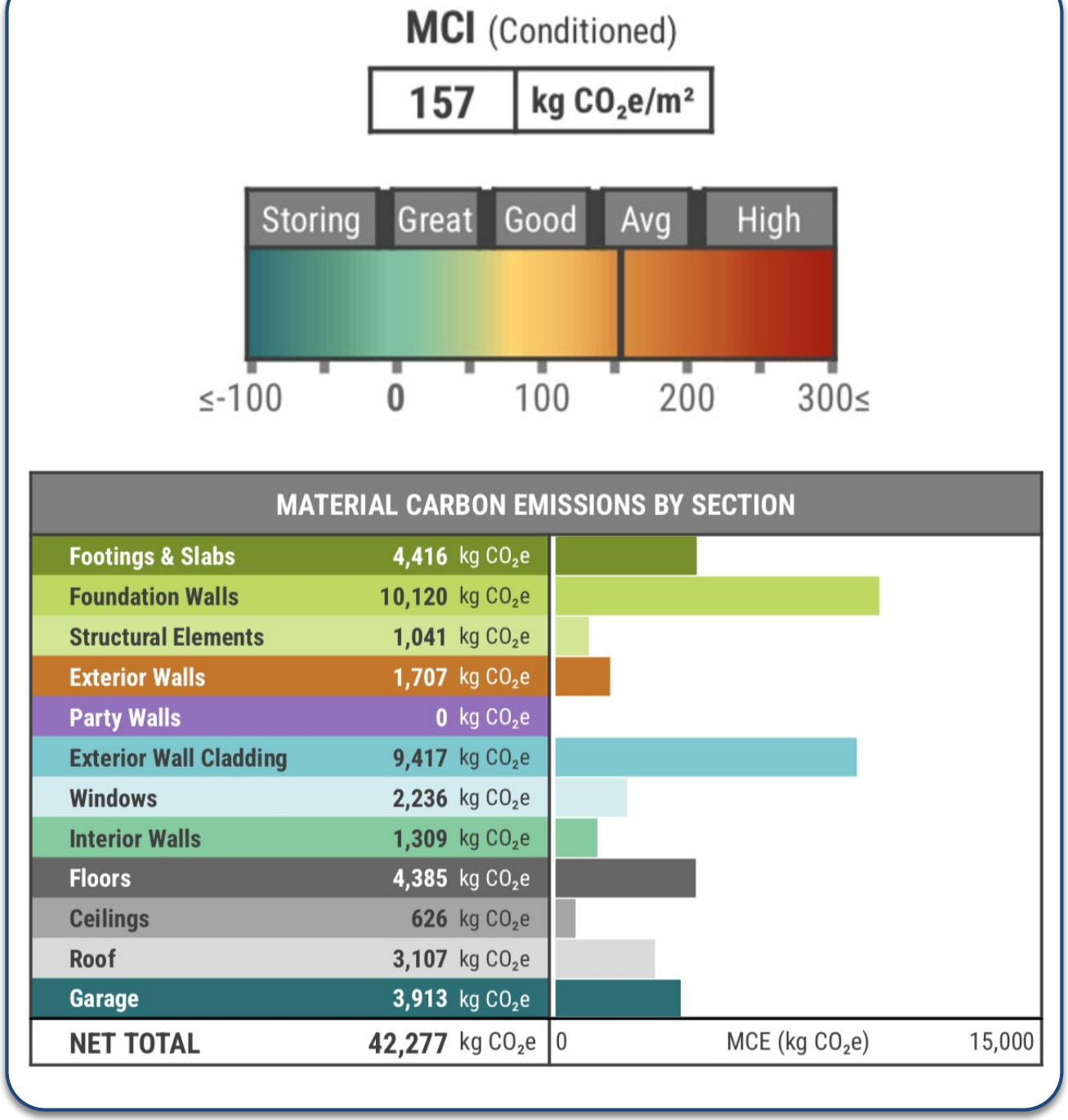


Material Carbon Results

As-Built : Code compliant

TOTAL MCE: 42,277 kg CO_2e

MCI (Conditioned)**: 157** kg CO_2e/m^2



Material Carbon Results

As-Built : Net-Zero

Material Changes :

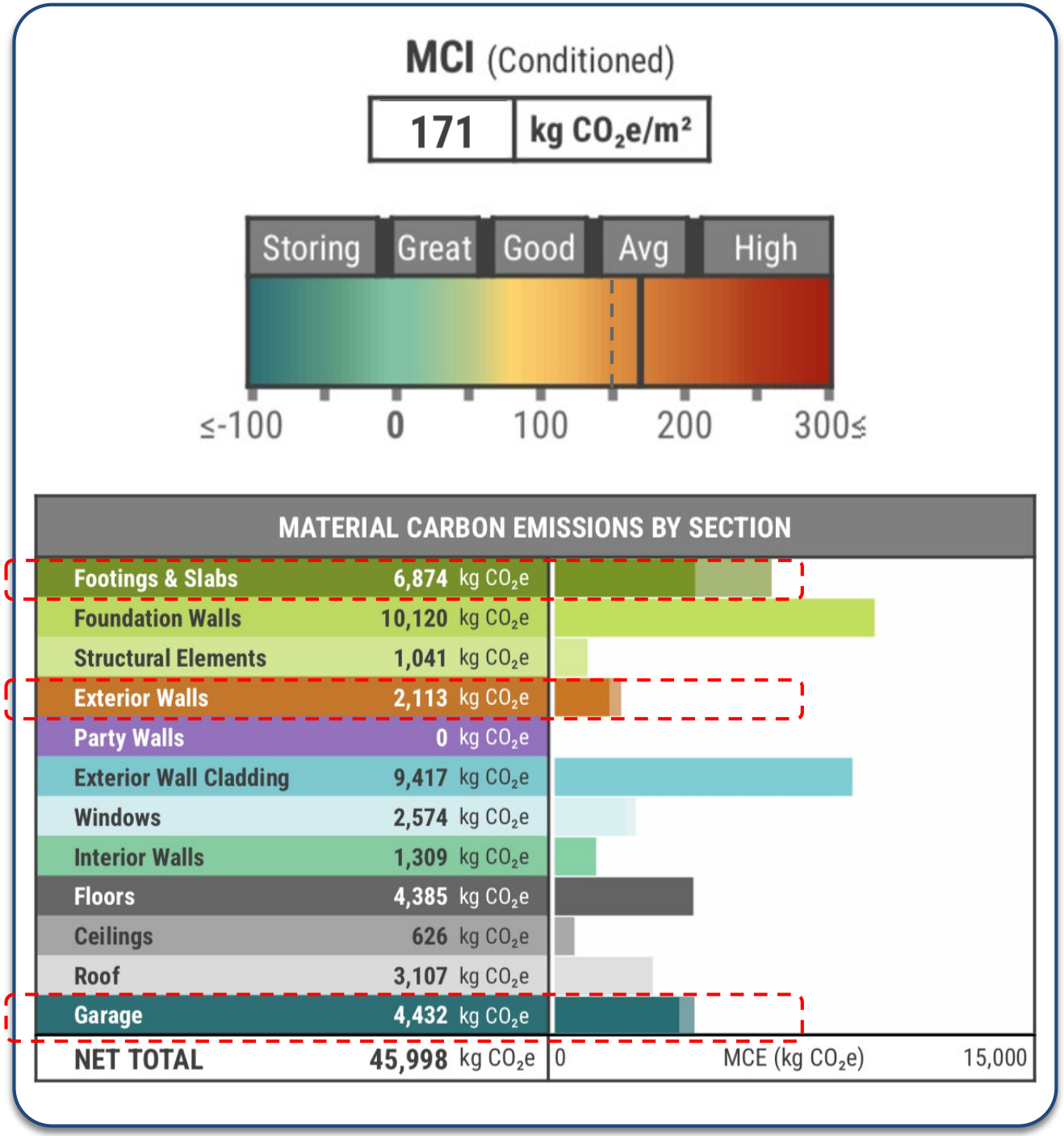
- Under slab insulation (Spray Foam)
- Increased insulation R-Value Ext. wall
- Increased insulation R-Value exposed floor
- Triple pane windows

TOTAL MCE : 45,998 kg CO_2e

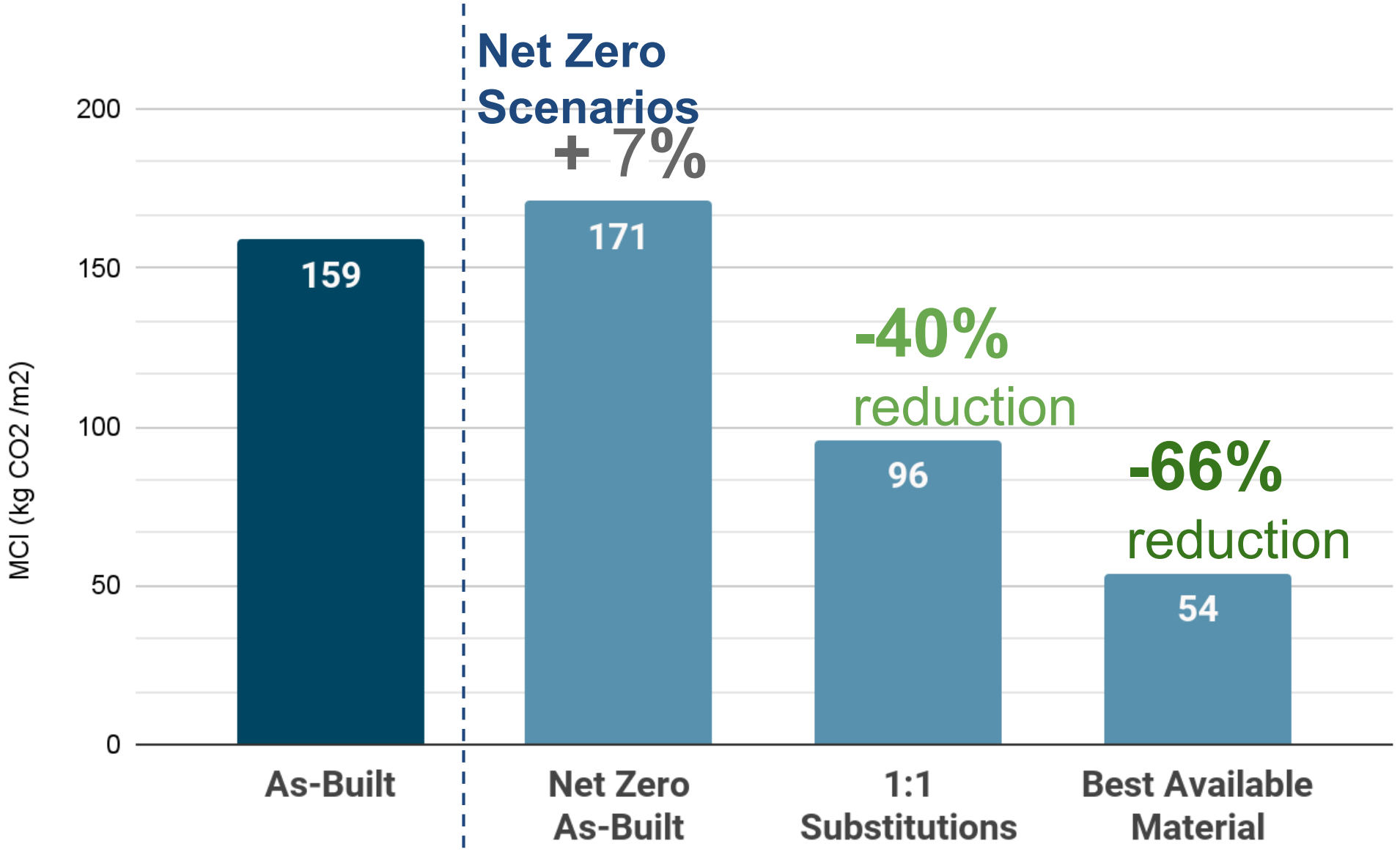
MCI (Conditioned)**: 171** kg CO_2e/m^2

+

7%



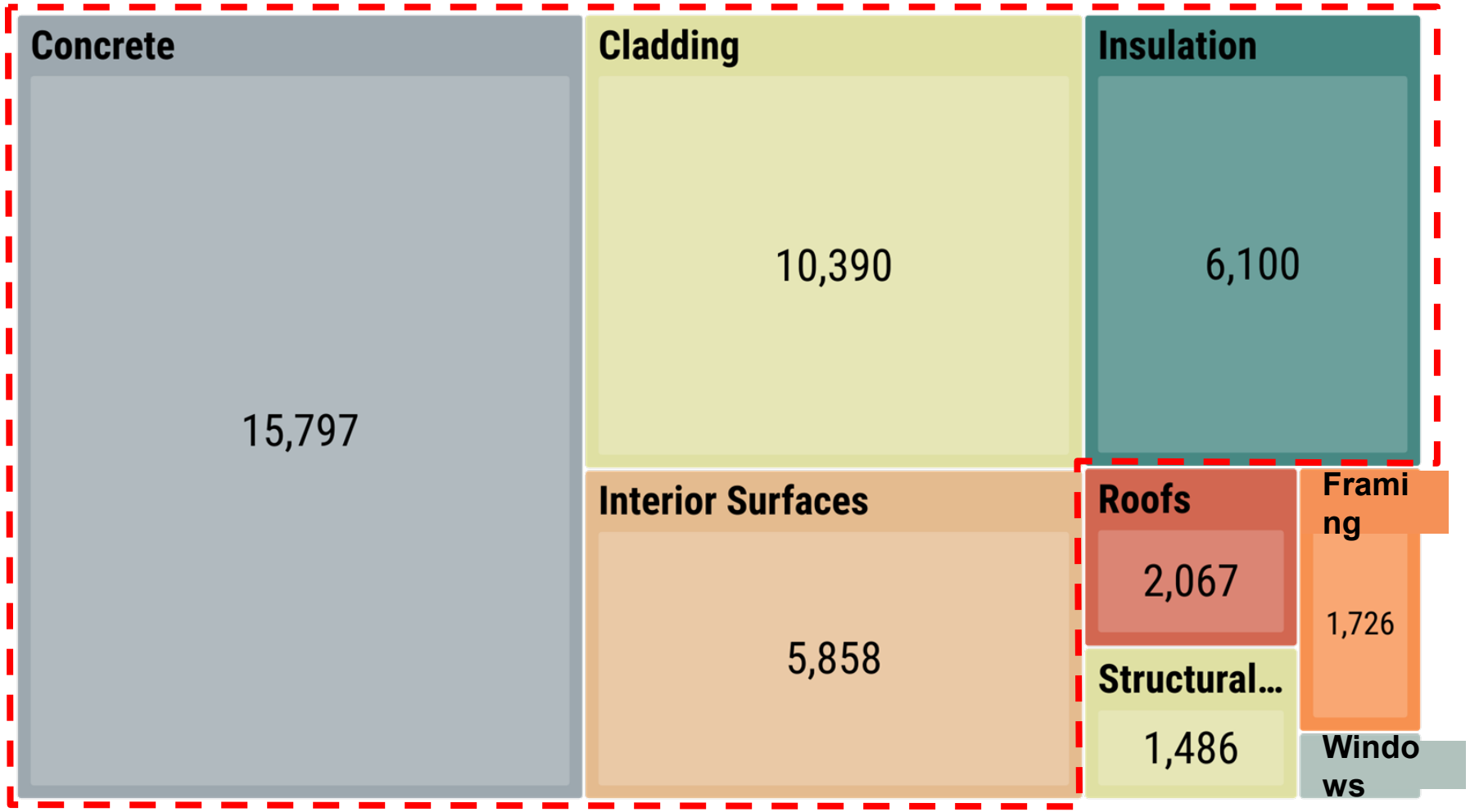
Material Carbon Intensities of Different Scenarios



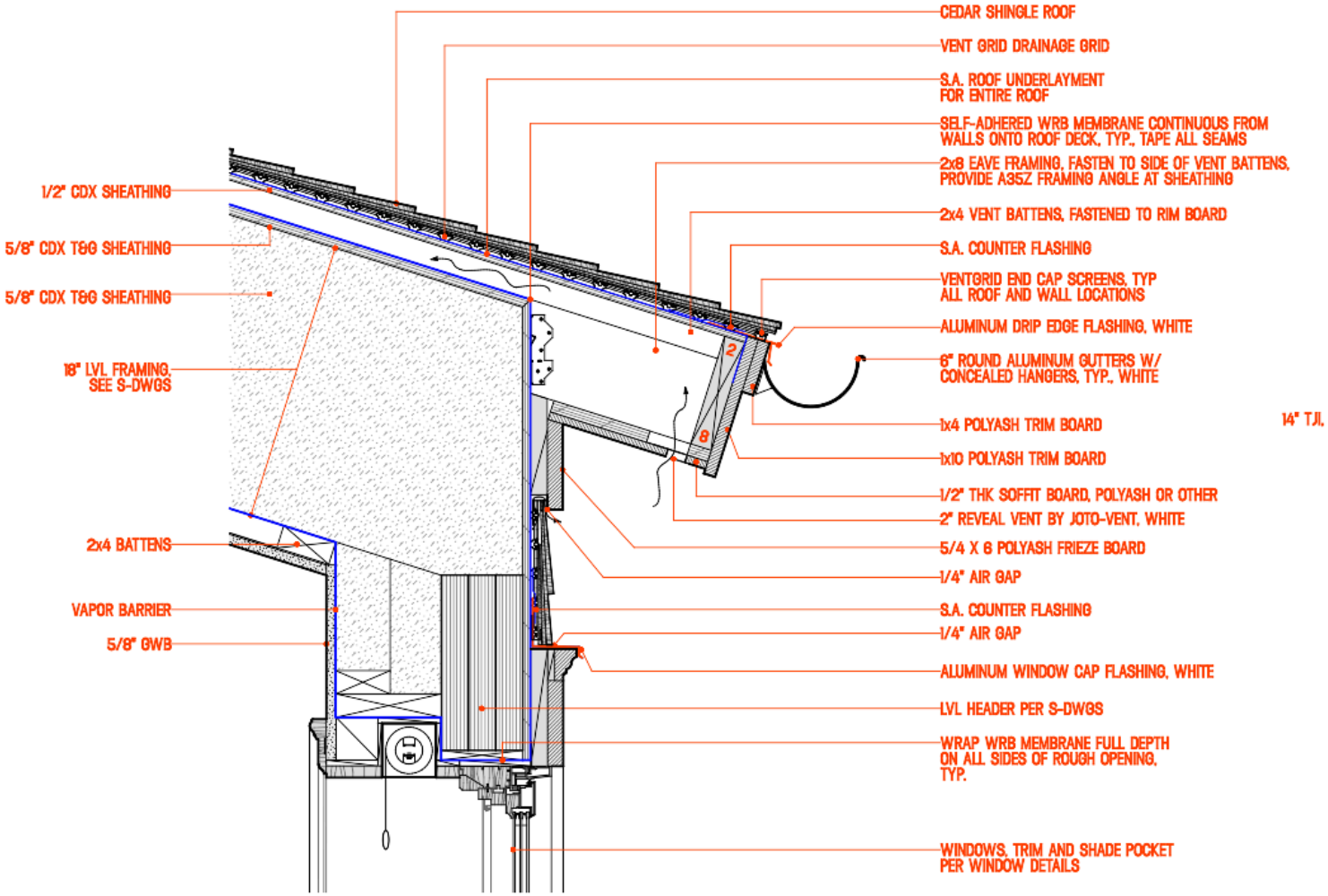
Net Zero As-Built - MCE Results per material

83% MCE from 4 material categories :

- Concrete
- Cladding
- Insulation
- Interior Surfaces



Net Zero As-Built - Total : 45,998 kg CO2e



1 DETAIL - DORMER OVERHANG
Scale: 1 1/2" = 1'-0"

Homebuyers don't buy embodied carbon. They buy health, comfort, and safety.

"Material health is a metric people care about because it directly and tangibly impacts them."

- participant, NRC focus group

"Decarbonization resonates most when framed as a health or safety benefit—not just a climate imperative."

- Boston Small Building Decarbonization Report

Interactive (2 minutes)

Turn to someone near you:

What is one material choice you're already making—
or could make tomorrow—that you'd like to evaluate differently?

Be ready to share one example with the group.

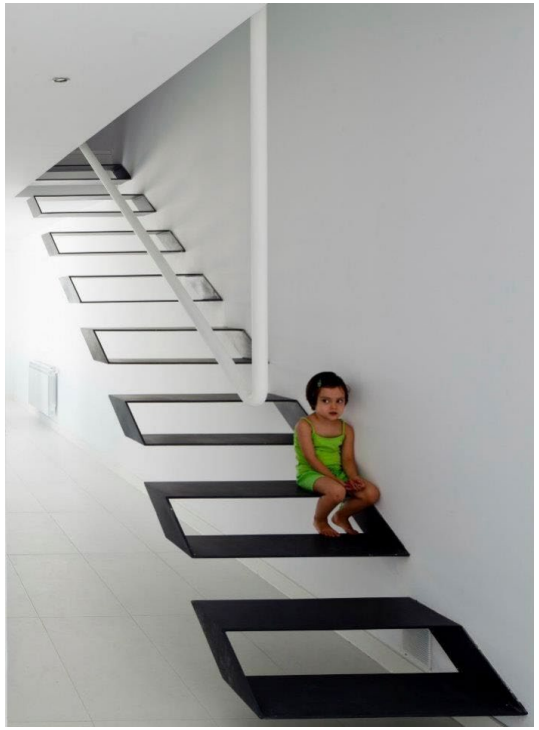
Builders and designers manage client and project risk, Knowingly or unknowingly.

Source: Carlson Exteriors, https://carlsonexteriors.com/2017/01/18/water-management/

CONSTRUCTION SCHEDULE

ajen Construction, Inc.

TASK DESCRIPTION	PLAN START	PLAN END	TYPE
Phase 1 Title	2017/2/15	2018/4/1	
Task 1 Description	2017/2/15	2017/8/15	B
Task 2 Dependent on Task 1	2017/8/15	#########	P
Task 3	2017/5/1	2017/10/1	R
Phase 1 Milestone A	2017/6/1	2017/6/1	X
Task 4	2017/2/25	2017/7/25	O
Task 5	2017/7/25	2018/3/25	G
Phase 1 Milestone B	2018/4/1	2018/4/1	X
Phase 2 Title			
Task 1	2017/4/1	2017/7/1	
Task 2	2017/7/1	2017/10/1	B
Task 3	2017/10/1	2018/1/1	Y
Task 4	2018/1/1	2018/4/1	P
Task 5	2018/4/1	2018/7/1	G
Task 6	2018/7/1	2018/10/1	R

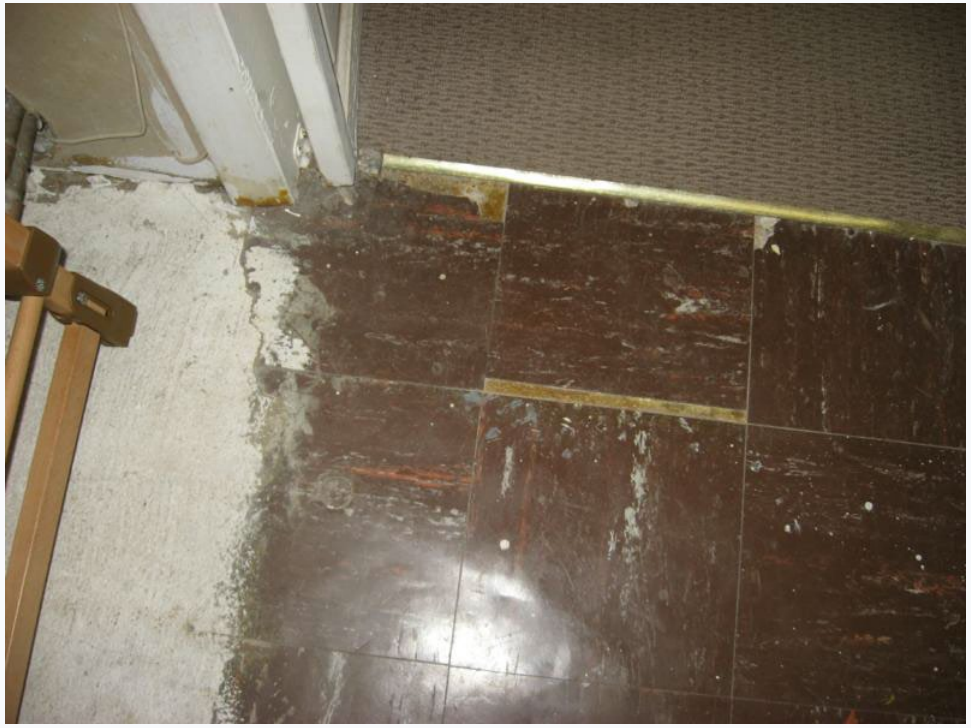


Source: WPS Template, https://template.wps.com/detail/construction-schedule-gantt-chart-xlsx-excel-9e6e0d66/

Source: Green Building Advisor, https://www.greenbuildingadvisor.com/article/bad-stair-design-contributes-to-falls

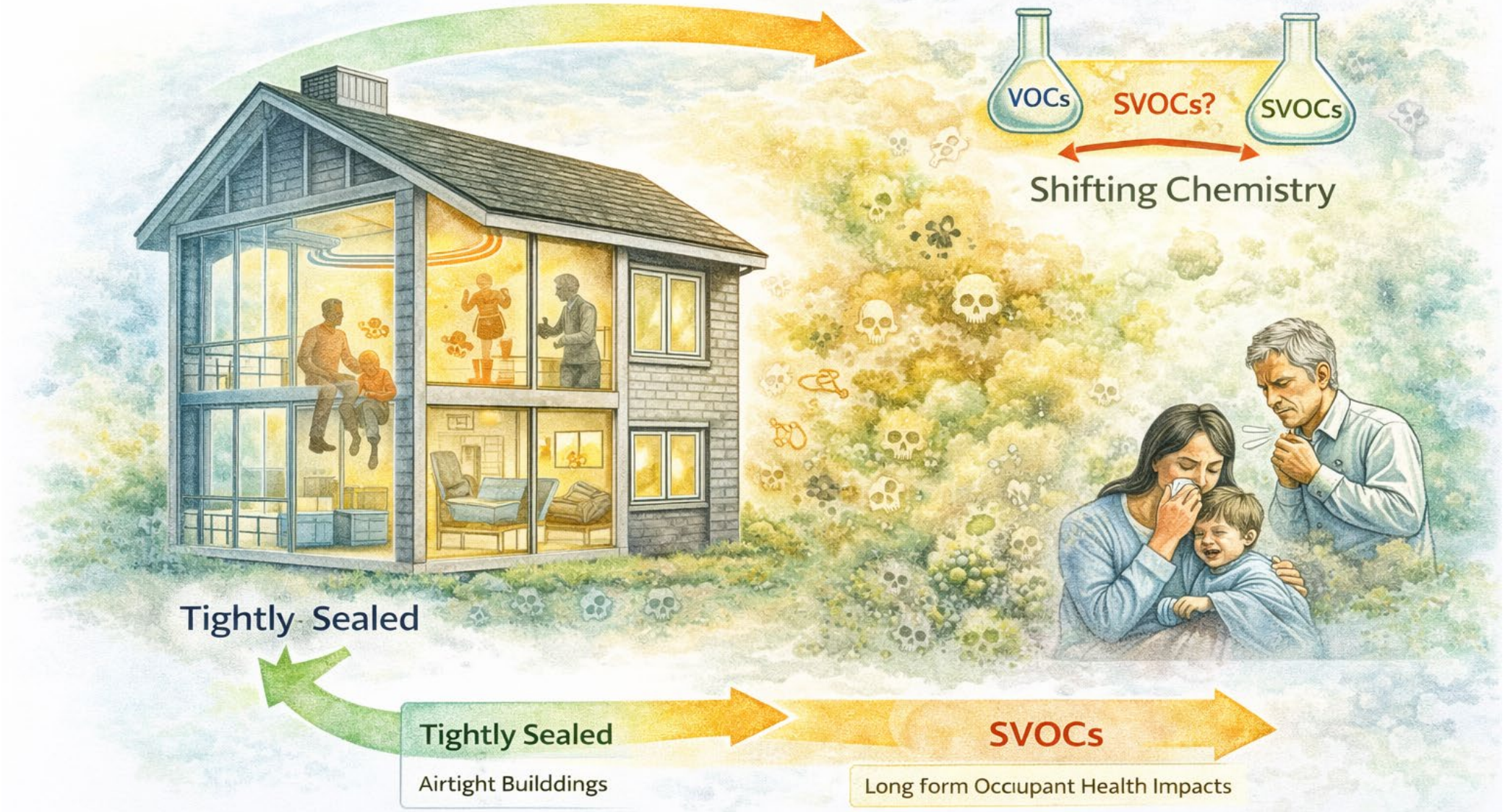
We’ve been here before: lead + asbestos

Source: U.S. EPA, https://19january2017snapshot.epa.gov/newsreleases/us-epa-settles-anaheim-real-estate-firm-failure-disclose-risks-lead-based-paint_.html



Source: Simmons Hanly Controy, https://www.simmonsfirm.com/blog/facts-asbestos-exposure-home-buyers-need-know/

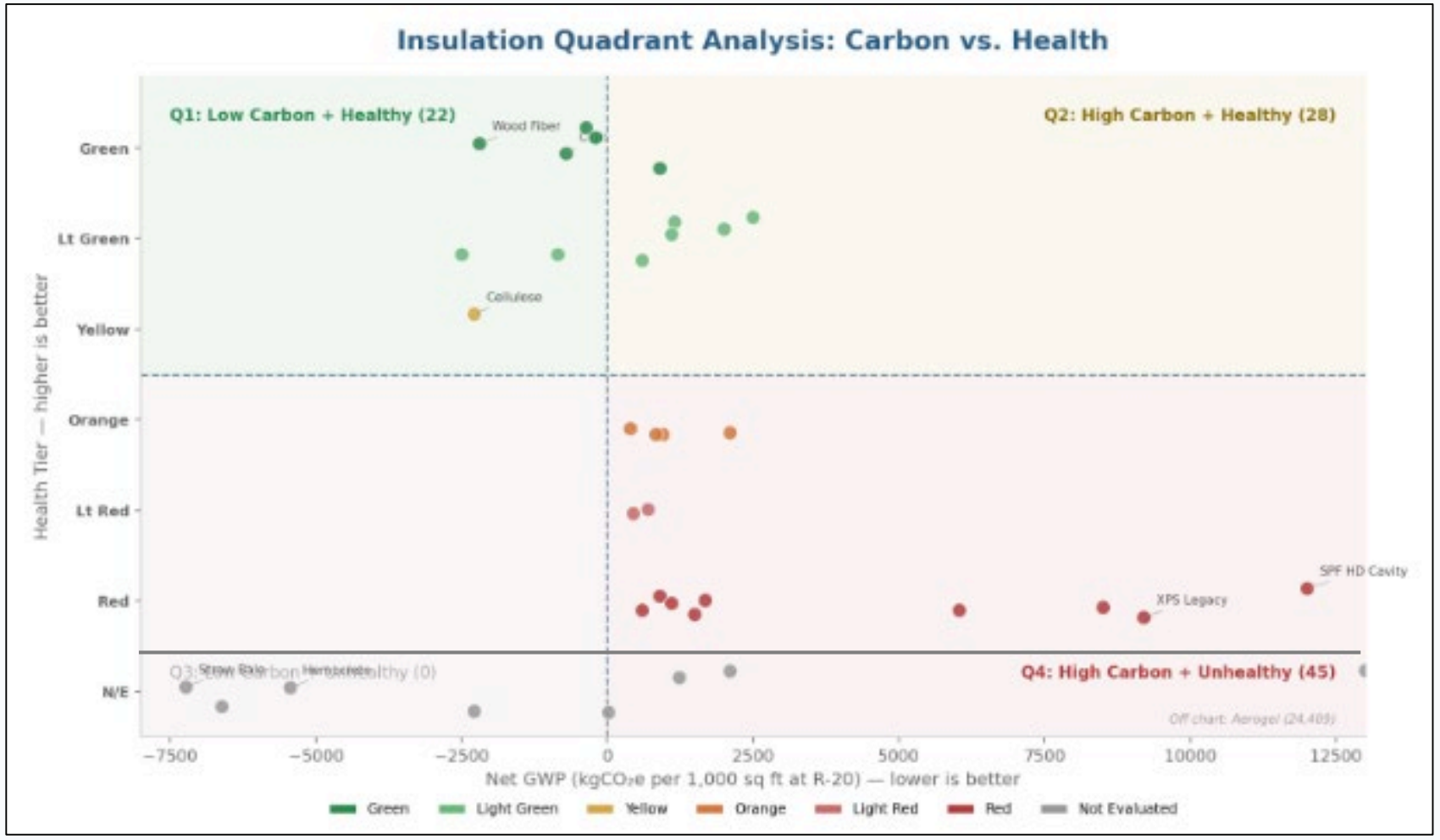
Building Tightness and Increased Health Risks



Health + carbon align (especially at the extremes)

Overlay of Informed and BEAM Insulation Data (Builders for Climate Action)

- Healthiest materials are lowest GHG emissions
- No unhealthy materials are low GHG emissions
- Some of the lowest GHG emission materials have no health ranking



Workforce health: exposure is part of the job

Source: Mike Xenakis, New Frameworks

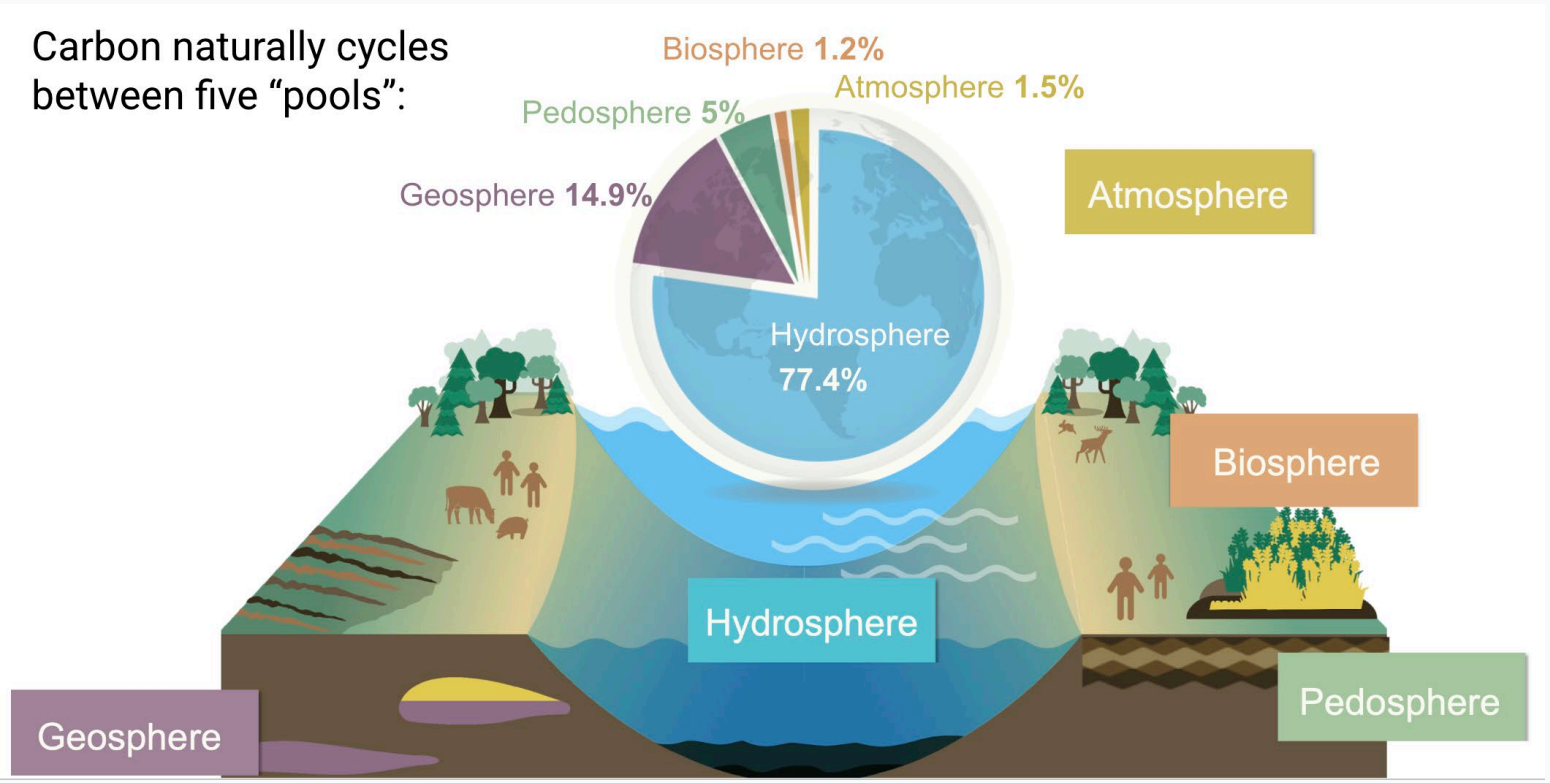
Forbes

Paint Is The Largest Source Of Microplastics In The Ocean, Study Finds

By Jamie Hailstone, Contributor. ⓘ Jamie Hailstone is a U.K-based reporter, w...

Published Feb 09, 2022, 03:41am EST, Updated Feb 10, 2022, 03:08am EST

Photo: MLADEN ANTONOV/AFP via Getty Images



Interactive: guided Q&A (keep it useful)

We’ll take questions in these buckets:

1) Materials + assemblies (foundation / insulation / wall & roof)

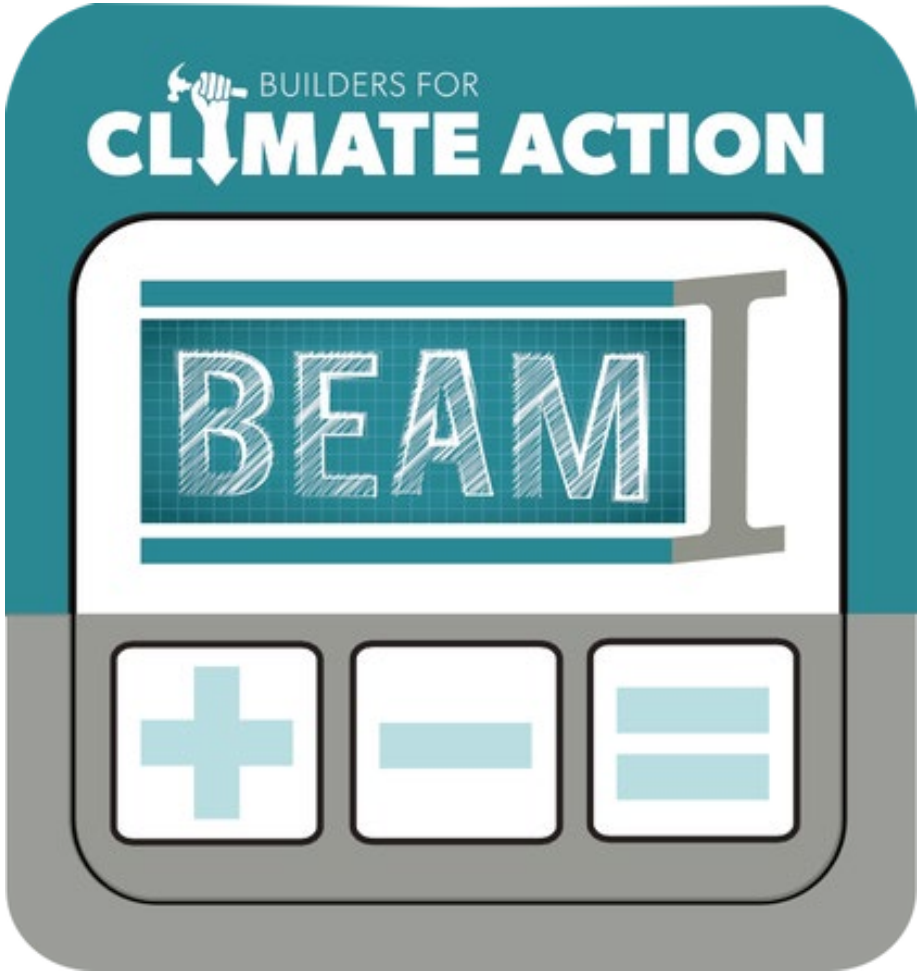
2) Tools (BEAM / Informed / others!)

3) Workflow + decision points (where this fits)

4) Barriers (cost, supply chain, client messaging)

So… go DO this

Keep learning with tools when you’re ready

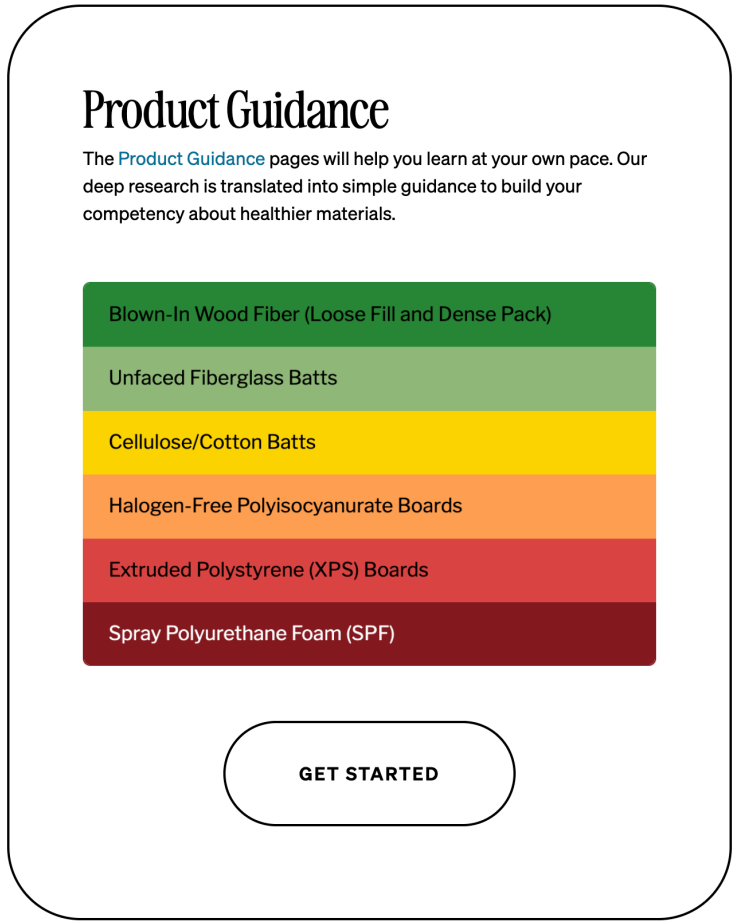


BUILDING EMISSIONS ACCOUNTING FOR MATERIALS

Use it for Carbon Counting:

- Material Comparisons
- Assembly Comparisons
- Building Assessments

INFORMED



Use it for Product Health Info:

- Material Comparisons
- Ingredient Analysis
- Product Selection

Use it for Product Health Info:

- Product Guides
- Research and Data
- Education and Training

Final call to action

When you walk into the next session and hear a material claim…

1) Check it in BEAM
2) Check it in Informed (or your preferred tool)
3) Decide if it belongs in your business

Small substitutions. Same building. Less carbon. Better health.

Thank you!
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Jacob Racusin (New Frameworks / Builders for Climate Action) • Jacob@buildersforclimateaction.org

BUILDINGENERGY BOSTON

Please fill out an evaluation for this session

or: *nesea.org/eval*

Northeast Sustainable Energy Association (NESEA)