

Advancing Wood in a Sustainable Built Environment

Natasha Jeremic
Manager Codes & Standards - Sustainability
Canadian Wood Council

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Canadian Wood Council
Conseil canadien du bois

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Canadian Wood Council Members



AFPA



APA



CMSA



CFPA
Central Forest Products Association



COFI



BC COUNCIL
OF FOREST
INDUSTRIES



PFS-TECO



PLB



ILMA
Interior Lumber
Manufacturers'
Association



Québec
Forest
Industry
Council



MLB



The Canadian
Wood Truss
Association
L'Association Canadienne
Des Fabricants De
Toitures De Bois



olma



OFIA



Wood Preservation Canada
Préservation du bois Canada

Thank you to our members for their ongoing support



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Mission

Protect and maximize market access

Influence codes and standards to ensure wood products can be used in building systems

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Mission

Make wood building products and systems easy to use

Publish and disseminate expert information

Publications and software, web design apps, seminars, education

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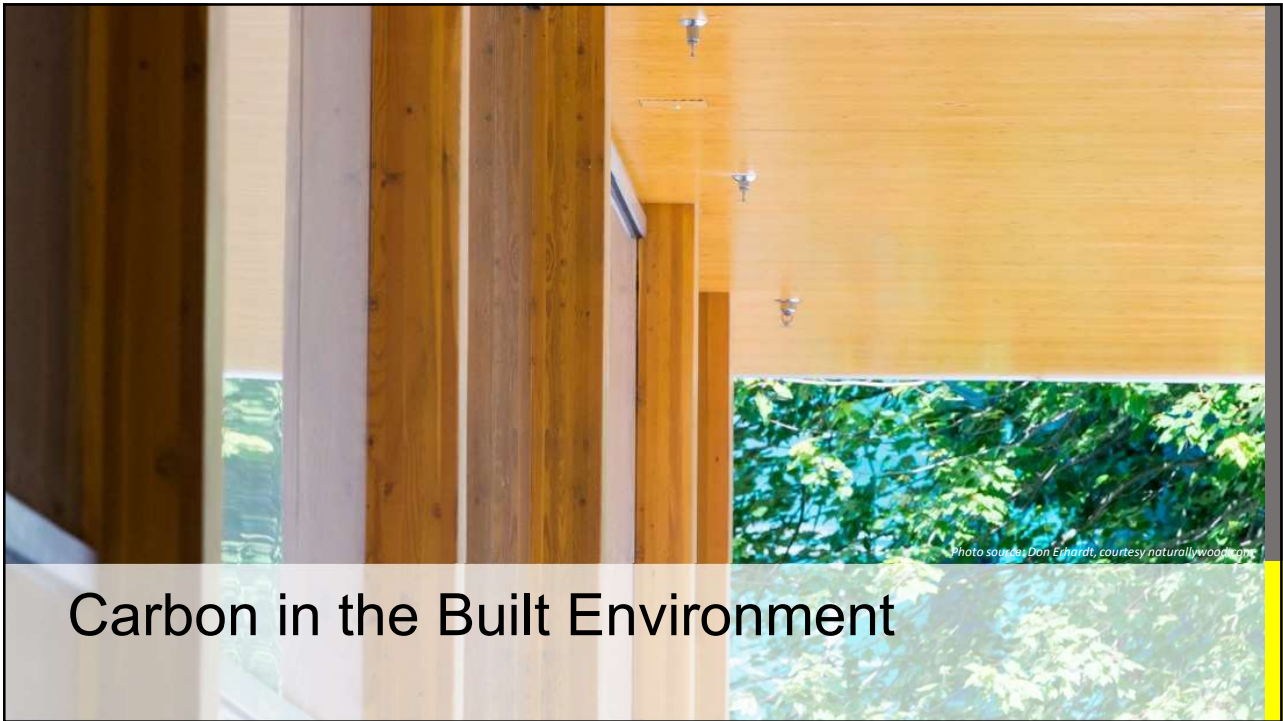


Sustainability of Wood Products

- Wood grows naturally & is renewable
- Over 90% of Canada's forest land is publicly owned
- Laws, regulations & policies require sustainable harvesting & regeneration

Photo Source: Candace Kenyon, courtesy naturallywood.com

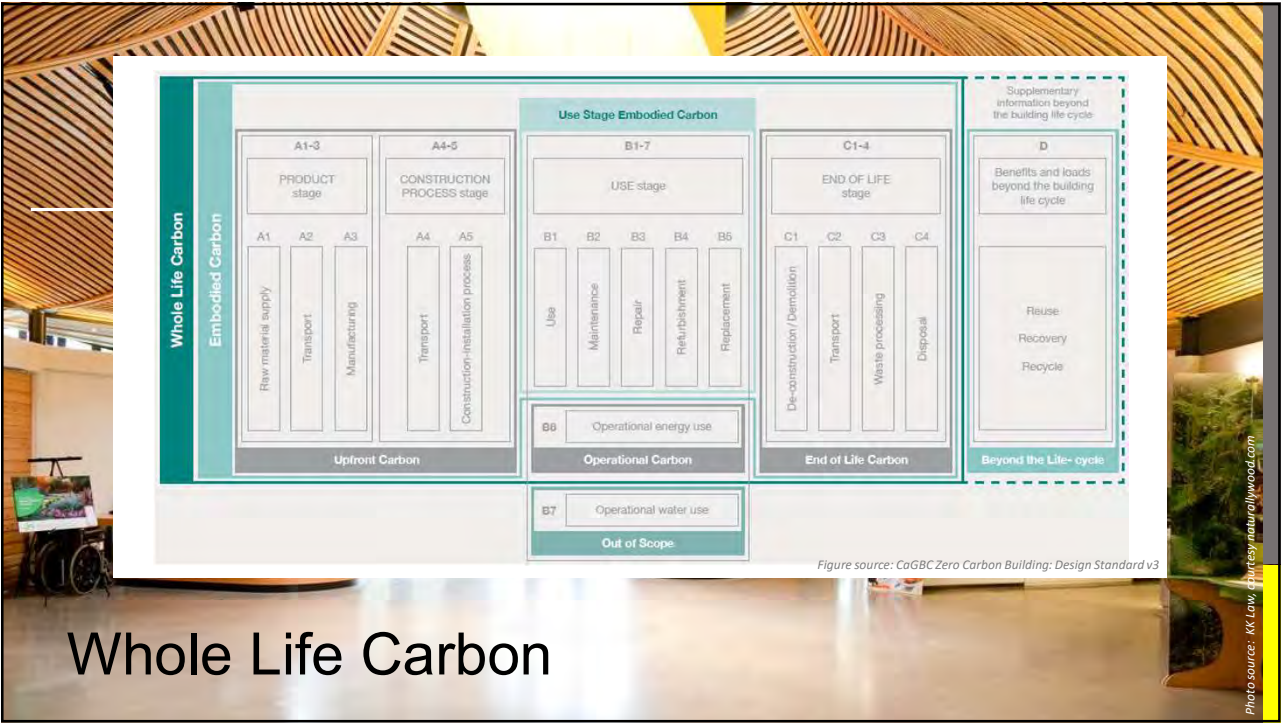
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Carbon in the Built Environment

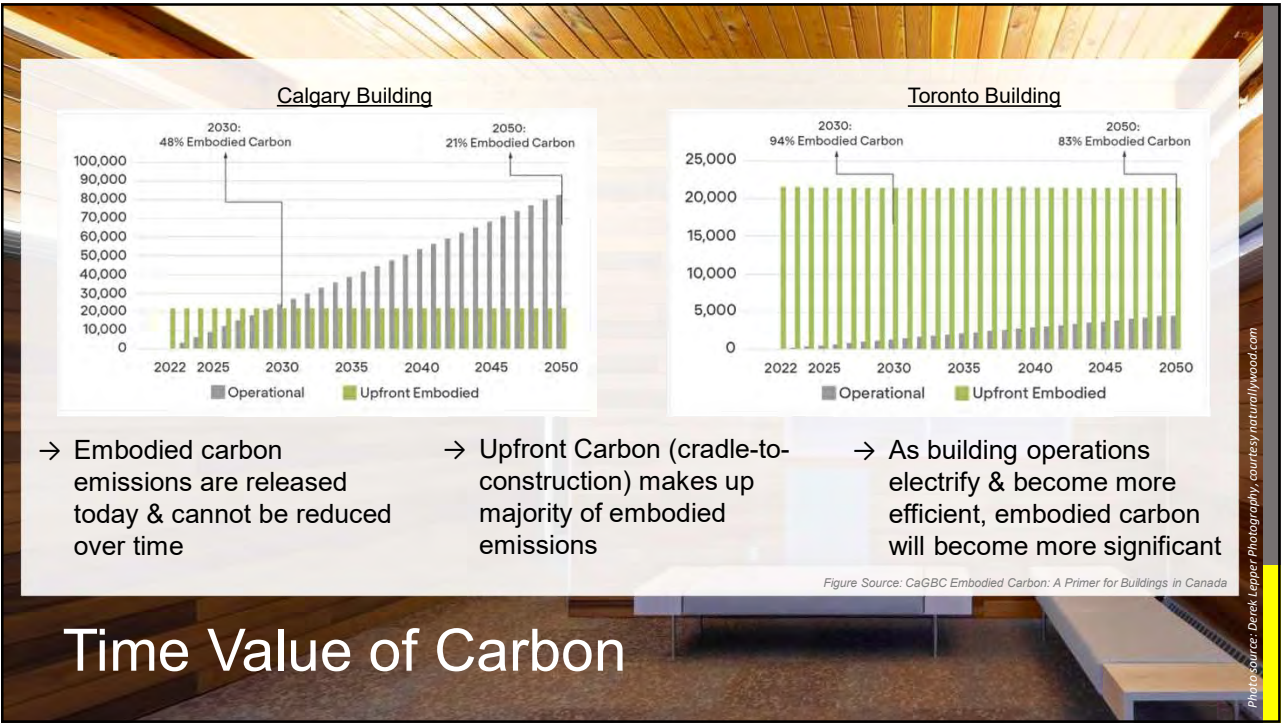
Photo sources Don Erhardt, courtesy naturallywood.com

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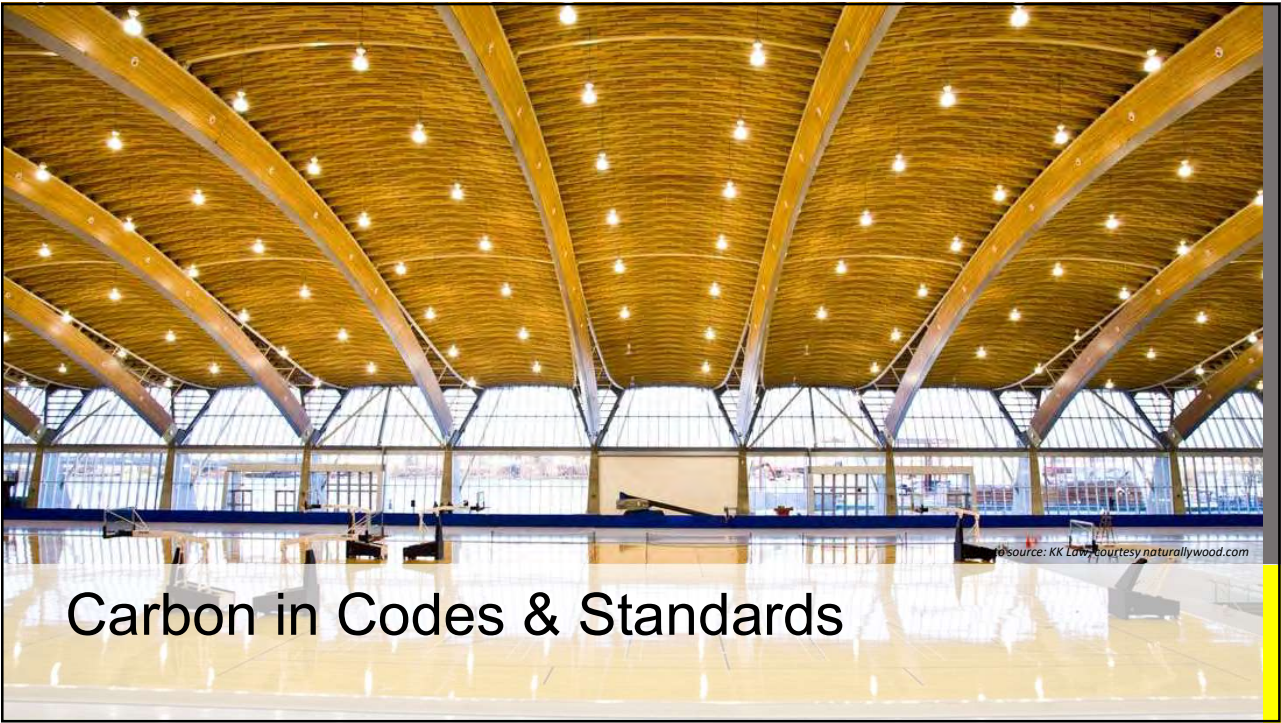
Whole Life Carbon

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Time Value of Carbon

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National Model Codes

Climate Change Mitigation

2025 Code Cycle

- New objective & functional statement to address GHG emissions
- Performance & prescriptive requirements to limit operational GHG emissions

2030 Code Cycle

- Performance requirements for embodied carbon of construction materials

GHG Emission Performance Level	Percent Building GHG Emissions Target	Percent Improvement
A	≤ 10%	≥ 90%
B	≤ 25%	≥ 75%
C	≤ 50%	≥ 50%
D	≤ 75%	≥ 25%
E	≤ 90%	≥ 10%
F	≤ 100%	≥ 0%

Start of Life Cycle



End of Life

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Certifications & Regulations

Embodied Carbon Requirements

- LEED v4.1 MRc1
- CaGBC – Zero Carbon Building Design Standard v3
- Vancouver Building By-Law
- Toronto Green Standard v4



Photo source: Dr. Roman Trubko, courtesy of Roman Trubko

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Building Life-Cycle Impact Reduction

Up to 4 points achievable via WBLCA

- 1 point for disclosure
- 2 points for ≥ 5% reduction
- 3 points for ≥ 10% reduction
- 4 points for ≥ 20% reduction & reuse

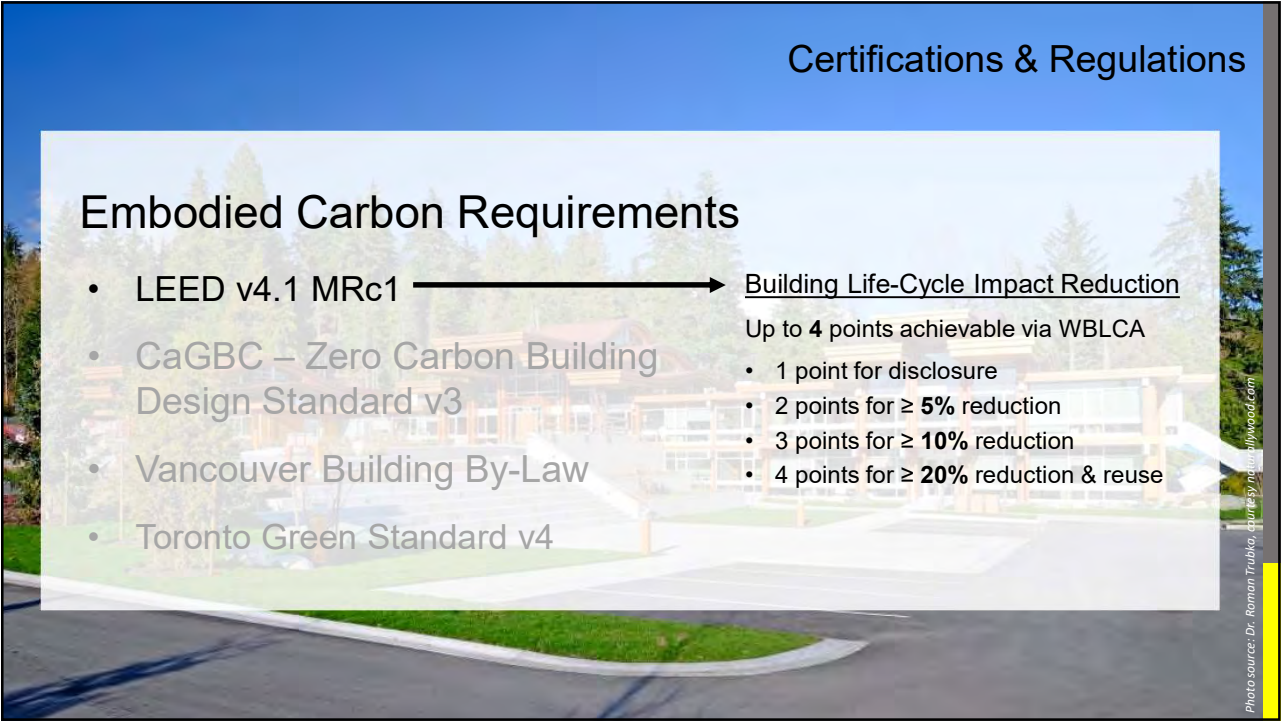


Photo source: Dr. Roman Trubko, courtesy of Roman Trubko

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Minimum Requirement

- ≥ 10% reduction OR ≤ 500 kgCO₂e/m²

Pre-approved Impact & Innovation Strategies

- ≥ 20% reduction OR ≤ 350 kgCO₂e/m²
- ≥ 40% reduction OR ≤ 240 kgCO₂e/m²
- Upfront carbon emissions ≤ 0 after accounting for **biogenic carbon**

Photo source: Dr. Roman Trubko, courtesy of [Woodward Clyde](#)

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New Part 3 Buildings (Oct 2023)

- Disclose & limit embodied carbon
 - ≤ 2x functionally equivalent baseline

New Part 3 Buildings (Jan 2025)

- Disclose & reduce embodied carbon
 - ≤ 20% for low-rise **wood buildings**
 - ≤ 10% for other buildings

Photo source: Dr. Roman Trubko, courtesy of [Woodward Clyde](#)

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Certifications & Regulations

Embodied Carbon Requirements

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Upfront Embodied Emissions Intensity

- Absolute limit of **350 kgCO₂e/m²**
- Mandatory for city-owned buildings
- Tier 2 (voluntary) for mid to high-rise residential & non-residential

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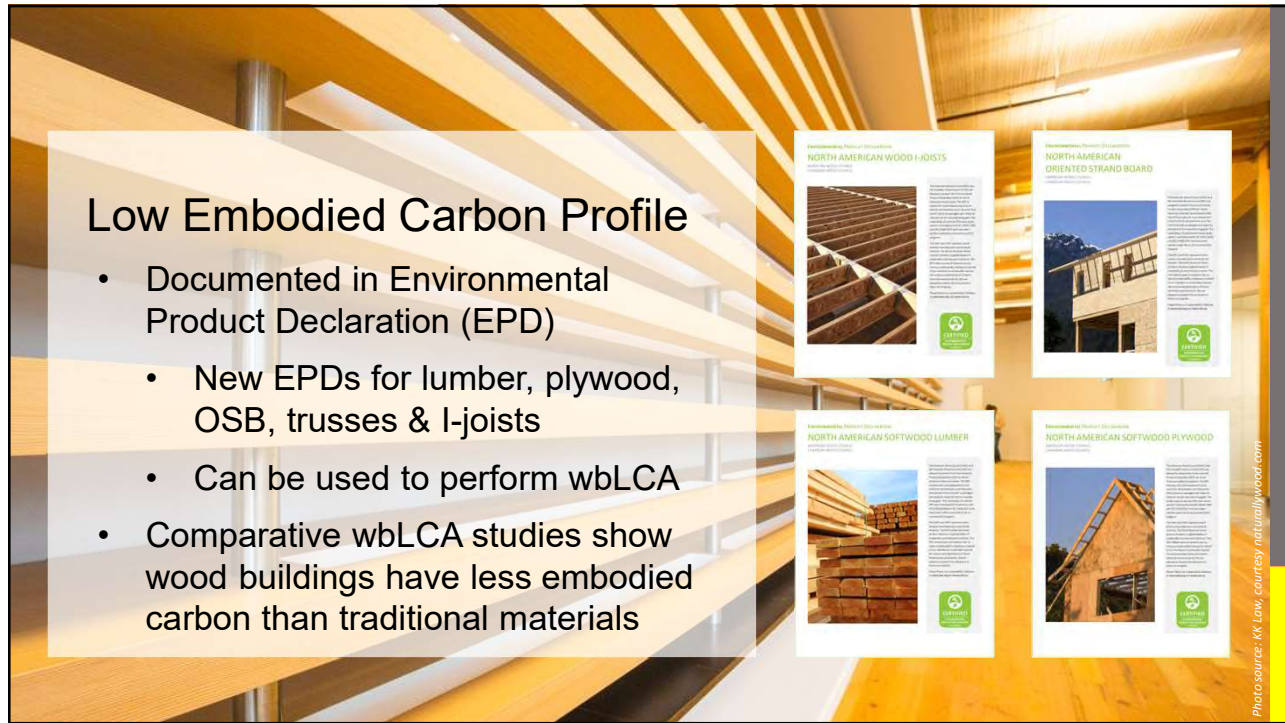


What role do wood products have?

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Low Embodied Carbon Profile

- Documented in Environmental Product Declaration (EPD)
- New EPDs for lumber, plywood, OSB, trusses & I-joists
- Can be used to perform wbLCA
- Comparative wbLCA studies show wood buildings have less embodied carbon than traditional materials



Photo source: KK Low, courtesy naturallywood.com

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50% of wood is carbon

based on dry weight

As per IStructE:

- Buys time for adaptation
- Reduces potential climate 'tipping points'
- Future carbon capture & storage technologies

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