



# Embodied Carbon Intergovernmental Coordinating Council

*Public Hearing #2*  
Draft: Proposals for Feedback  
September 29th, 2025

# MEETING GUIDELINES

- This is a hybrid meeting and **will be recorded**
- The goal of this hearing is to share updates and seek feedback to help guide the Council's work
- The contents of these slides are a *proposal* for the Council's recommendations and do not reflect any final decisions or policy
- Please hold questions until the end of the presentation

# AGENDA

- Reviewing the Legislative Charge
- Updates since last public hearing: overview of proposed recommendations
- Open Comment

# REVISITING THE LEGISLATION

59 (c) The council shall prepare an embodied carbon reduction plan, which shall include, but  
60 shall not be limited to, strategies to measure, monitor and reduce embodied carbon. The plan  
61 shall: (i) with respect to major building and transportation projects of executive offices,  
62 departments, divisions, centers, agencies and authorities of state and municipal governments,  
63 include, but not be limited to, steps to encourage and, where appropriate, recommend requiring:  
64 (a) environmental product declarations for construction materials commonly used in such  
65 projects; and (b) the use of low-embodied carbon materials, with particular attention to cement  
66 and concrete mixtures, steel, glass, asphalt and asphalt mixtures and wood, in such projects; (ii)  
67 review progress in research, development and commercialization of low-embodied carbon  
68 technologies and materials in the government, private and nonprofit sectors within and outside of  
69 the commonwealth; (iii) make recommendations for establishing a process to set, on or before  
70 January 1, 2026, maximum global warming potential values for products likely to be used in  
71 such building and transportation projects including, but not limited to, cement and concrete  
72 mixtures, steel, glass, asphalt and asphalt mixtures and wood; (iv) develop recommended

72 mixtures, steel, glass, asphalt and asphalt mixtures and wood; (iv) develop recommended  
73 procedures for the use of: (a) EPDs in state government contracting and procurement; and (b)  
74 low-embodied carbon materials in the commonwealth, where available and at reasonable cost,  
75 including conditions under which waivers may be obtained; (v) examine current laws,  
76 regulations, policies and guidelines that affect the use of EPDs and low-embodied carbon  
77 materials in the private and nonprofit sectors and recommend laws, regulations, policies or  
78 guidelines to increase the use of EPDs and low-embodied carbon materials; and (vi) consider  
79 interactions between embodied carbon and operational carbon to ensure policy recommendations  
80 to reduce embodied carbon will also contribute to the reduction of operational carbon. The  
81 council shall consider: (i) the best approaches to integrate the reduction of embodied carbon into  
82 the state building code, including the stretch and specialized stretch energy code pursuant to  
83 section 96 of chapter 143 and the state building code; and (ii) best practices to incentivize and  
84 enhance the reuse of building materials and decrease building demolition.

# OVERVIEW: RECOMMENDATIONS

1. **REPORTING:** Collect Environmental Product Declarations (EPDs) and material quantity (MQ) data for eligible projects and materials
  - I. Allocate funds for the procurement of a centralized data collection software
2. **DEFINITIONS & THRESHOLDS:** Define "low-embodied carbon materials" and set initial thresholds for GWP limits
3. **MESUREMENT:** Require whole building life cycle assessment of embodied carbon for qualifying DCAMM projects
4. **PHASED APPROACH:** Convene a technical advisory group which will review and decrease GWP limits every 3 years and set a target for reduction over time
5. **BUILDING CODE:** Recommend a 3-compliance path approach to building code adoption
6. **AGENCY PLANS:** Recommend that DCAMM and MassDOT undertake a comprehensive analysis of decision flows around Embodied Carbon (EC) and develop agency-level plans for instituting procedures to incorporate EC into decision making

*draft*

## RECOMMENDATION 1: REPORTING

- Covered projects shall require the collection of **Product-Specific Type III EPDs** for **Ready-mix concrete, Ordinary Portland Cement (OPC), Pre-cast concrete, Structural Steel, Steel Reinforcement, Asphalt mixture\*** and **material quantities (MQs)** for all listed materials, except OPC
  - The **Executive Office of Administration and Finance (A&F)**, in collaboration with the **Executive Office of Technology Services and Security (EOTSS)** shall allocate funds for the procurement of a centralized software for the collection of project data, which may be used across agencies

Covered projects: there shall be a specified square footage or volume of material procured that will trigger the requirement for EPD collection

*\*Note that the final list of materials to be included is still under consideration, the legislation asks the council to specifically consider the following materials: cement and concrete mixtures, steel, glass, asphalt and asphalt mixtures and wood*

## RECOMMENDATION 2: DEFINITIONS

### 2. The division shall set a definition for "**low-embodied carbon material**"

- Such as ... "Any material with a GWP value below 75% of industry average"
- In collaboration with DCAMM, MassDOT shall include in its Qualified Construction Materials List (QCML) a "low-carbon material" certification
- This certification would not be used as a limit, but could have applications for procurement bonuses, grant eligibility

*"Low-embodied carbon material", material used in building and transportation construction that has been verified by the division to embody carbon emissions that are of sufficiently low, based on a threshold set by the division, as compared to the embodied carbon emissions of a conventional material fulfilling the same function*

# RECOMMENDATION 1&2: REPORTING & THRESHOLDS

Material	EPD Reporting	MQ Reporting	GWP Limits (project average)	EPD Reporting Year	GWP Limits Target Year
Ready-Mix Concrete – Buildings	Yes	Yes	110% of Industry Average	2026	2028
Ready-Mix Concrete – Infrastructure	Yes	Yes	110% of Industry Average	2026	2028
Ordinary Portland Cement (OPC)	Yes	No	No (GWP limits for Concrete act as a proxy here)	2026	N/A
Precast Concrete	Yes	Yes	125% of Industry Average	2026	2028
Structural Steel	Yes	Yes	125% of Industry Average	2026	2028
Steel Reinforcement	Yes	Yes	125% of Industry Average	2026	2028
Asphalt Mixture	Yes	Yes	125% of Industry Average	2026	2028

*draft*



# RECOMMENDATION 3: MEASUREMENT

## 3. Project life cycle assessment for embodied carbon

- In the division, require projects with **Gross Square Foot Area over** a certain threshold to achieve the LEED credit for WBLCA
  - Data Repository for WBLCA

In future, this requirement could set the stage for setting GWP limits at the project level.

## RECOMMENDATION 4: PHASED APPROACH

4. The Council shall assemble a technical working group which shall every 3 years assess and reduce limits, set targets, and adaptively manage the state's approach to Embodied Carbon

- On a more regular basis (2 years, as set out by legislation) the Council should submit an updated plan and progress report
- Council should establish a defined schedule for implementation
  - 2-3 year initial timeline; 3-5 year review period following that
  - Initial legislation outlines that limit shall be not greater than X

## RECOMMENDATION 4: PHASED APPROACH

4. Establishing intermediate and long-term goals, specifying decreasing limits over time
  - For example: "... Achieve 50% of the current industry benchmark by 2050. 15% decrease in GWP limits every 5 years until 2050 ..."

## RECOMMENDATION 5: BUILDING CODE

5. Recommend that the Board of Building Regulations and Standard(s) consider adopting within the Massachusetts **building code or energy/stretch code** a 3-compliance path approach Embodied Carbon provisions (for projects above a certain size threshold):

- Building Reuse: Reuse at least 45% of an existing structure and exterior. When reuse is combined with new construction, the total addition area using this pathway is limited to double the area of the existing structure
- Performance: Complete a WBLCA demonstrating 10% lower embodied carbon emission than a baseline project design
- Prescriptive: Document EPDs for listed materials that are on average lower than a specified threshold of global warming potential

# RECOMMENDATION 6: AGENCY PLANS

6. Recommend that DCAMM and MassDOT undertake a comprehensive analysis of decision flows around Embodied Carbon and develop agency-level plans for instituting procedures to incorporate EC into decision making, in collaboration with the Council

*example:*

Project Stage	Key Decisions	Who Makes or Influences Decision	Impact on Embodied Carbon	Tools to Influence Decision
Initial Project Discussion	Does the functional need require a capital project?	Agency Leaders, DCAMM Planners	Capital projects all involve embodied carbon emissions	Policies and standards to guide planning decisions
	What size facility is required?	Agency Leaders, DCAMM Planners, Designer	Scale of project directly relates to level of emissions	Policies that standardize and formalize goals of maximizing space efficiency
Option Development & Evaluation	Renovate/reuse existing facility or build new?	Agency Leaders, DCAMM Planners, Designer	Reuse and renovation avoids embodied carbon	Policies and standards to guide planning decisions

*draft*

## ADDENDUM: WAIVERS

- As a part of the data collection procedure for EPDs, DCAMM and MassDOT shall establish a process for collecting waivers and determine sufficient criteria for waiving EPD requirements and meeting GWP limits under certain conditions (eg. Supply chain constraints, etc.)

# FURTHER RECOMMENDATIONS TO BE CONSIDERED/DEVELOPED

- Deconstruction: pilots, incentives
- Market Development: grants, state agreements, etc.
- Education: online materials, webinars, etc.

**OPEN COMMENT**



## **SPEAKERS MAY WISH TO CONSIDER:**

- What is an appropriate project threshold for EPD requirements?
- What are appropriate GWP thresholds?
- What is a realistic long-term goal for decreasing GWP limits over time?

IF YOU WOULD LIKE TO SUBMIT  
ADDITIONAL COMMENT, PLEASE SEND TO:

***CLIMATE.OFFICE@MASS.GOV***

**THANK YOU!**