S.1982/H.3002 An Act Relative to the Use of Low-Embodied Carbon Concrete in State Projects

INTRODUCTION

S.1982/H.3002 An Act relative to the use of low-embodied carbon concrete in state projects establishes minimum standards for low-embodied carbon concrete used by contractors and subcontractors working on state projects in order to reduce embodied carbon emissions. It also requires these contractors to issue periodic reports to evaluate the environmental, public health, and safety impacts of low embodied carbon concrete to ensure that decarbonization is done in an equitable manner. Finally, the bill establishes a stakeholder working group to help set standards, identify incentives, and examine the impacts of low-embodied concrete requirements.

WHAT IS EMBODIED CARBON AND WHY CONCRETE IMPORTANT?

Embodied carbon is the greenhouse gas (GHG) emissions associated with the manufacturing, transportation, installation, maintenance, and disposal of building and infrastructure materials and accounts for between 11-23% of global annual emissions. While all building materials contain emissions, concrete is by far the largest source of embodied carbon. Furthermore, while low-carbon alternatives for some building materials are currently challenging, reducing the embodied carbon of concrete is relatively easy and inexpensive. In spite of the staggering impact of embodied carbon and concrete, little has been done to take action and require or incentivize the use of low-carbon concrete.

Establishes minimum standards for low embodied carbon concrete used in state projects

Requires contractors to issue reports evaluating the benefits of using low-embodied carbon concrete

Establishes a stakeholder working group to help set standards, identify incentives, and examine the impacts of low-embodied concrete requirements

WHY THIS LEGISLATION IS IMPORTANT?

Massachusetts will join other states such as New Jersey and California who have already integrated buy-clean concrete policies. Without taking action, Massachusetts is at risk of falling behind other states that have already implemented buy-clean policies and created the market for low-embodied carbon concrete.

Reducing emissions from concrete would make a huge impact and is achievable with proper state support. This is a critical first step, that has been taken by other states. It has proven to be a reasonable, successful, and cost-effective initial step to addressing embodied carbon emissions.

By requiring state projects to incorporate low-embodied concrete, this bill has to potential to jumpstart the market for low-carbon concrete in the private sector by increasing demand and normalizing the process of measuring and reducing carbon in concrete.