



Legislation Text

File #: 21-2172, **Version:** 1

Resolution to Encourage and Accelerate the Use of Low Embodied Carbon Building Materials in Construction

Whereas, There is scientific consensus regarding the reality of climate change and recognition that the emission of greenhouse gases from human activity and the construction and operation of the built environment are significant drivers of climate change;

Whereas, The City of Ann Arbor is committed to reducing its anthropogenic contributions to climate change through the development of environmentally-minded policies, such as the A²ZERO plan for carbon neutrality;

Whereas, Embodied carbon accounts for about half of the total lifecycle carbon emissions of a new infrastructure project, and as operational emissions reduce from energy-efficiency actions, the relative importance of reducing embodied carbon will grow;

Whereas, Embodied carbon refers to the carbon emissions generated as a result of the manufacturing and transportation of materials and products, and construction of an infrastructure project; embodied emissions can be significant in large projects such as buildings, roads and water treatment plants;

Whereas, The Global CO₂ Initiative, a research center at the University of Michigan, has offered to collaborate with the City of Ann Arbor to develop a resource guide, to be hosted by the City of Ann Arbor, that describes effective methods to calculate and reduce embodied emissions in building materials;

Whereas, A 2021 task force organized by AIA Huron Valley, Washtenaw Contractors Association, and the A2 2030 District developed recommendations to lower embodied carbon of steel and concrete that can be implemented both immediately and in the future in SE Michigan, which will be used to inform the resource guide;

Whereas, The City of Ann Arbor has the opportunity to be an innovator and leader in the State of Michigan in promoting the use of these technologies and other strategies to reduce embodied energy in the built environment; and

Whereas, On July 13, 2021 Energy Commission unanimously adopted a resolution urging City Council to act to promote and encourage the use of low embodied building materials in municipal operations and actively promote the use of low embodied building materials locally and regionally;

RESOLVED, That City Council directs the City Administrator to develop criteria to utilize low embodied carbon building materials in its building and infrastructure projects, where the utilization of these materials does not significantly increase the costs of or delay project completion and where utilization does not compromise either construction integrity or public safety;

RESOLVED, That City Council directs the City Administrator to provide an annual report to City Council and Energy Commission about projects where low embodied building materials were utilized;

RESOLVED, That City Council directs the City Administrator to develop and share resource materials on the City's Planning website to 1) educate and encourage developers and property owners to reuse /repurpose existing buildings of meaningful size as a means of minimizing the net total carbon footprint of construction while not obstructing new development with significant social or total lifecycle environmental benefits and 2) utilize low embodied carbon building materials in new buildings; and

RESOLVED, That City Council directs the City Administrator to conduct public outreach about low embodied carbon building materials and the techniques available to lower embodied carbon emissions.

Sponsored by: Councilmembers Briggs, Radina, Ramlawi, Disch and Griswold and Mayor Taylor