

Embodied Carbon Workshop: Market Transformation for Cement and Concrete



Thank you for joining us for the Embodied Carbon Workshop and Roundtable earlier this summer. Please see the links below for **Additional Reading Materials**:

1) **Federal and State Perspectives:**

- a) Federal Buy Clean Initiative <https://www.sustainability.gov/buyclean/>
- b) U.S. Innovation to Meet 2050 Climate Goals <https://www.whitehouse.gov/wp-content/uploads/2022/11/U.S.-Innovation-to-Meet-2050-Climate-Goals.pdf>
- c) DOE's Pathways to Commercial Liftoff <https://liftoff.energy.gov/>
- d) Federal LCA Commons <https://www.lcacommons.gov/about-us-0>
- e) Industrial Decarbonization Accelerator <https://www.industrialenergyaccelerator.org/areas-of-work/the-industrial-deep-decarbonization-initiative/>
- f) GSA's Interim LEC Material Requirements <https://www.gsa.gov/system/files/Interim%20IRA%20LEC%20Material%20Requirements%20-%20used%20in%20Pilot%20May%202023%2005162023.pdf>
- g) FAQs on GSA's IRA LEC Material Requirements <https://www.gsa.gov/system/files/FAQs-on-GSAs-IRA-LEC-Material-Requirements.pdf>

2) **Industry -- New Technologies, Pilots and other Key Considerations:**

- a) Research Center at Texas A&M (largest university infrastructure research lab in the US) <https://cir.tamu.edu>
- b) Largest Civil & Environmental Engineering department in the US (with several researchers currently working on the problem of carbon footprint of concrete) <https://engineering.tamu.edu/civil/index.html>
- c) Start-up (focused on optimizing transportation) <https://oslconcrete.com>
- d) Start-up (focused on replacing reinforcing steel with recycled steel fibers and natural aggregates with recycled aggregates) <https://buildwithcircle.com>
- e) Reducing the carbon footprint of concrete <https://www.concreteinnovations.com/on-demand>

3) **Benchmarking Carbon Intensity, Standards, Testing, TEAs, LCAs, New Methods:**

- a) Measurement through Environmental Product Program <https://www.nrmca.org/association-resources/sustainability/environmental-product-declarations/>
- b) Performance-based specifications <https://www.nrmca.org/wp-content/uploads/2022/03/GuideToSpec2021EmbodiedCarbon.pdf>
- c) Top 10 Ways to Reduce Concrete's Carbon Footprint <https://www.nrmca.org/wp-content/uploads/2022/07/Top10WaysReduceConcreteCarbonFootprint.pdf>
- d) An example of how to calculate a carbon budget for a building https://www.nrmca.org/wp-content/uploads/2020/02/Whole_Building_LCA_Example.pdf