

Strategies to Reduce the Cradle-to-Gate Embodied Carbon Emissions of Paving Concrete
Q&A
4/16/2024

The questions and comments submitted during the webinar follow with answers that our speakers have provided.

1. Is the IRA money only for pavements? (California)
FHWA's Low Carbon Transportation Materials Program is not limited to pavements. More details on eligible applicants, eligible materials and their qualification processes for construction, and example activities are detailed on the webpage at <https://www.fhwa.dot.gov/lowcarbon/>
2. Comment: This guide seems to be generic for most part so I did not understand why it was written specifically for concrete pavements. (California)
Thank you for the comment. The strategies can be applied to all types of transportation concrete, although some specific pathways discussed in the guide, e.g., opening to traffic assessment, are pavement specific.
3. For carbon infused concrete, the intent is to infuse the concrete mix with carbon to offset the amount of cement needed in the mix to achieve the same strength. I have run into contractors not trusting this process and ultimately still using the same amount of cement as if they weren't using carbon infused concrete, essentially nullifying the goal for utilizing carbon infused. My question: any guidance on talking contractors into trusting this type of concrete? (Indiana)
Mixture suppliers desire to deliver concrete that achieves specifications, while contractors desire a mixture that can be placed and consolidated. If an admixture, such as carbon dioxide injection, can help them achieve these goals at a lower cost, then it might make sense for them to invest time understanding the technology. Trust can only be built through testing and use, and this will take time. Contractors will gravitate towards technologies that work and do not increase their risk.
4. Comment: Guide Link: https://www.intrans.iastate.edu/wp-content/uploads/2024/03/guide_for_reducing_cradle-to-gate_emissions_w_cvr.pdf