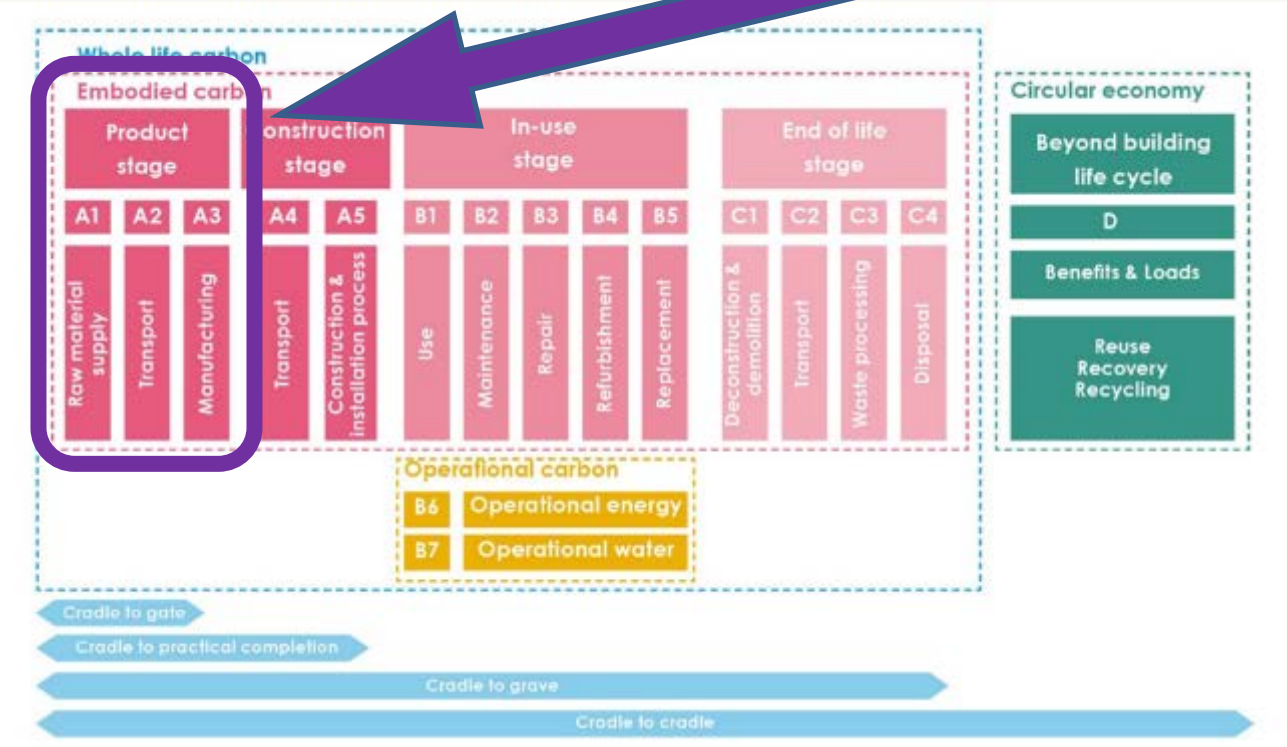
CONTEXT

Life Cycle Stages…

Gets A LOT of attention

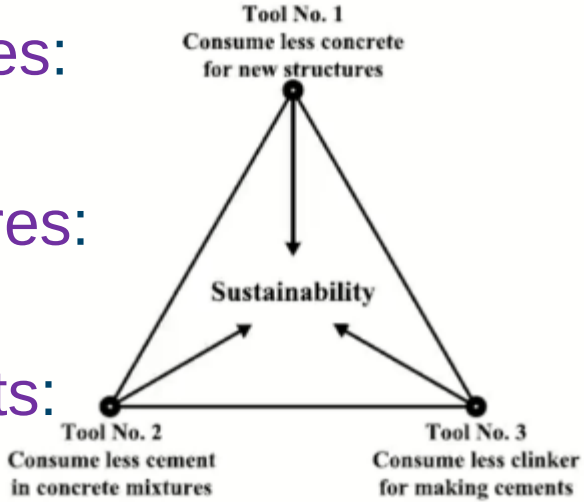


Does it matter where the CO_2 comes from…?

Opportunities in the EMBODIED space

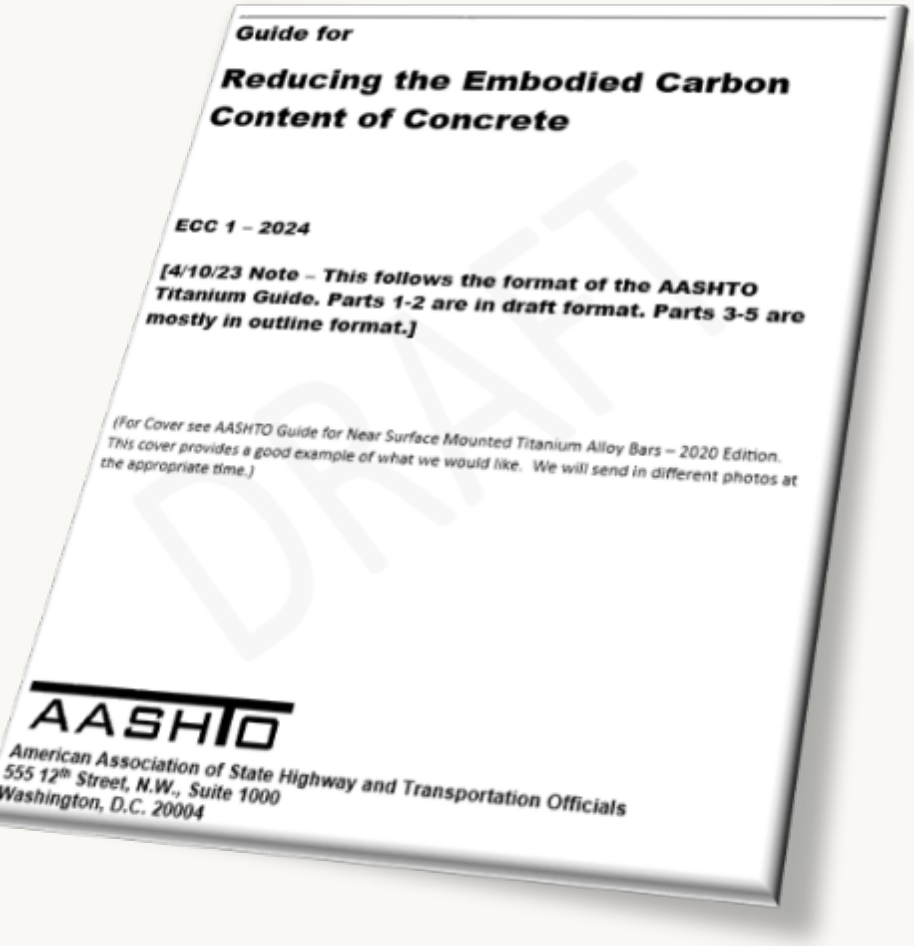
Specific levers to reduce **embodied CO_2**…

1) Consume **less concrete** for new structures:
   - Be efficient with our pavement designs
2) Consume **less cement** in concrete mixtures:
   - Optimizing our concrete paving mixtures
3) Consume **less clinker** for making cements:
   - Embrace lower carbon cements



Opportunity is in combining these…

[Source: Mehta, CI February 2009]



- Drafting an AASHTO Guide to **low-embodied** carbon concrete now…
- Also drafting a benchmarking report to quantify reduction in CO_2 since 2005.

Parting Thoughts…

- From what we know today **optimized mixtures** provide real opportunities to reduce embodied CO_2
- Must not miss the broader opportunities…
- **We can** control what we consider