

SE 2050 ECAP Submission Form

Email *

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Firm Name *

CORA Structural

Education

The first step to increased engagement within your firm is through education. We all should strive to understand the impacts of our design decisions and their effects on our environment.

Distribute firm-wide announcement of your firm's pledge to join the SE 2050 Commitment. *



Completed



Not Completed

Provide a brief narrative describing how your firm is promoting a firm-wide education program for embodied carbon reduction and the firm's commitment to SE 2050. *

At CORA Structural, every current and future staff member is briefed during onboarding on the importance we place on embodied carbon reduction and the central role it plays in our design philosophy. We emphasize the integration of embodied carbon considerations into the earliest phases of project planning—often before a proposal is even written—so that it becomes an integral part of our collaboration with clients and design teams.

Our founder and principal served as the inaugural Chair of the SE 2050 Program, and that leadership experience continues to inform and energize our firm-wide approach. Through internal discussions, project reviews, and ongoing learning, we maintain a culture of awareness and action around embodied carbon, reinforcing our long-term commitment to SE 2050's mission.

Name of Embodied Carbon Champion (Point Person) *

Michael Gryniuk

Email of Embodied Carbon Champion *

michael.gryniuk@corastrutural.com

Phone number of Embodied Carbon Champion *

6172216010

LinkedIn URL

Set a date within the first year to present the “Embodied Carbon 101” Webinar to your firm. Incorporate this information into your orientation/on-boarding programs.

*

- ☒ Committed / Completed
- ☐ Not Committed / Not Completed

Minimum (1) additional elective to educate your firm about embodied carbon and a narrative of its significance.

*

- ☒ Committed / Completed
- ☐ Not Committed / Not Completed

ELECTIVES (Min. (1) required, recommended to achieve (4) per year): *

- ☒ Have one representative of your firm (any employee) attend quarterly external education programs (e.g. webinar, workshop) provided by SE 2050, Carbon Leadership Forum (CLF), or other embodied carbon resources.
- ☒ Share the SE 2050 library of resources with technical staff.
- ☒ Share embodied carbon reduction strategies with your firm as outlined in Top 10 Carbon Reducing Actions for Structural Engineers document produced by SE 2050.
- ☒ Nominate a minimum of (1) employee per office to participate in a CLF Community Hub.
- ☒ Provide narrative outlining plans for minimum (2) firm-wide presentations per year on the topic of embodied carbon
- ☒ Present the document, “How to measure and report embodied carbon” to all technical staff.
- ☐ Attend a presentation or demo of an LCA-based tool used to calculate embodied carbon.
- ☐ Initiate an embodied carbon interest group within your firm and provide a narrative of their goals.
- ☐ Provide a narrative of how the Embodied Carbon Reduction Champion will engage embodied carbon reduction at each office. (intended for multi-office firms)
- ☐ Other actions you feel appropriate and a narrative for why.

Elective Narrative (Optional):

Reporting

Quality data is essential to making informed decisions and setting important benchmarks and the development of appropriate embodied carbon reduction targets. The SE 2050 database is a central component to building a successful Commitment Program and reaching our collective embodied carbon reduction goals by 2050.

Submit an annual minimum of (2) projects per U.S structural office or (5) total projects for the firm to the SE 2050 Database. *

- ☒ Completed
- ☐ Committed and on track
- ☐ Need help reaching this target
- ☐ Not Completed

Number of Projects Reported Last Year (zero in first year)

2 _____

Number of Offices Reporting Last Year (zero in first year)

1 _____

Provide a narrative on how your firm plans to measure, track, and report embodied carbon data. *

At CORA Structural, we follow a clear and collaborative process to measure, track, and report embodied carbon throughout a project's lifecycle. Early in design, we provide clients with a simple summary of estimated structural quantities and embodied carbon using industry average or representative EPDs, along with a brief narrative explaining embodied carbon and potential reduction strategies.

One-on-one meetings with the architect and owner are critical during this phase to understand knowledge gaps, set expectations, and establish achievable project goals. As the design develops, we refine our estimates and conduct a more detailed life cycle assessment using tools such as Tally or OneClick LCA. Periodic check-ins help align assumptions and maintain focus on embodied carbon goals.

This process allows us to vet the data throughout design and into construction, improving both accuracy and transparency. It also ensures that the information we collect is consistent, reliable, and ready for submission to the SE 2050 database.

Describe the internal training for embodied carbon measurement you provided or will provide. *

We provide simple primers to introduce staff to embodied carbon measurement, along with example projects and space to ask questions as they onboard at their own pace. As they gain comfort, we encourage them to take a deeper dive—exploring LCA tools and workflows in a way that aligns with both their learning process and the timelines of active projects.

One of our greatest resources is our founder, whose expertise in embodied carbon and ability to simplify complex concepts provides invaluable support—especially for early-career staff. This mentorship-driven approach creates a supportive environment for skill-building and fosters firm-wide engagement with embodied carbon.

ELECTIVES (Not required, recommended to achieve (1) per year):

- ☒ Submit all projects to the SE 2050 Database
- ☐ Meet your target average embodied carbon reduction from the previous year.
- ☐ Report a greater percentage of projects than the preceding year.
- ☐ For a project submitted to the database, ask the Architect or Owner if the project has a carbon budget or if there are established project sustainability goals at the project kickoff meeting.
- ☐ Other actions you feel appropriate and a narrative for why.

Elective Narrative (Optional):

Embodied Carbon Reduction Strategies

Embodied carbon reduction of structural materials is the ultimate goal of the SE 2050 program. As a starting point, you will have access to the SE 2050 project database and Program resources to identify and set strategies. This section also serves to share lessons learned and incite innovation. Demonstrate leadership by not only applying, but developing best practices and actively collaborating with the design community. This is our profession's opportunity to take action and make an impact.

Set an EC reduction goal for the coming year and an implementation narrative (Qualitative goals focused on education are appropriate for the first year) *

We aim to achieve an aggregate embodied carbon reduction of at least 10% across all projects, compared to baseline assessments using industry average embodied carbon values. This goal reflects our commitment to integrating reduction strategies early in design and tracking progress consistently across our portfolio.

For second year's ECAP and beyond, provide a narrative about what you have learned about embodied carbon reduction in the past year. Describe successes and misses to help the program improve.

Over the past year, we've learned the importance of consistent advocacy for best practices in embodied carbon reduction. On fast-paced projects, it has been especially challenging to implement meaningful reductions, as early design decisions are often made before there's time to evaluate alternatives.

We've also encountered a persistent misconception that lower embodied carbon always means higher cost—when in fact, many reduction strategies (like material efficiency or optimizing structural systems) can reduce both carbon and cost. Addressing these perceptions early and often remains a key focus for us moving forward.

Minimum (1) additional elective to educate your firm about embodied carbon and a narrative of its significance. *

☒ Committed / Completed

☐ Not Committed / Not Completed

ELECTIVES (Min. (1) required, recommended to achieve (4) per year): *

- ☐ Incorporate data visualization into your ECAP. How are you looking at data to make informed design decisions and communicate design options to your clients?
- ☐ Provide a project case study in your ECAP that captures a reduction of embodied carbon or some lessons learned.
- ☒ Create a project-specific embodied carbon reduction plan.
- ☒ Complete a system embodied carbon design comparison study during the project concept phase.
- ☒ Participate in a project LEED design charrette and speak to potential design considerations impacting embodied carbon.
- ☐ Calculate your firm average benchmark for embodied carbon.
- ☒ Update your specifications and incorporate embodied carbon performance. Include embodied carbon in your submittal review requirements.
- ☒ Collaborate with your concrete supplier to reduce embodied carbon in a mix design.
- ☒ Work with a contractor during material procurement to meet an embodied carbon performance criteria on at least (1) project.
- ☐ Have an Environmental Product Declaration (EPD) created as a result of a project.
- ☒ Incorporate biogenic materials on at least one project annually.
- ☐ Provide a narrative of how circular economy has been used on your projects. Incorporate re-use or design for deconstruction into at least one project.
- ☐ Quantify construction waste reduction on a project and the impact to embodied carbon.
- ☐ Integrate embodied carbon mitigation strategies in your General Notes.
- ☐ Other actions you feel appropriate and a narrative for why.

Elective Narrative (Optional):

Advocacy

True change can only come with industry-wide adoption. This section recognizes that our impact reaches beyond any one firm. Plan opportunities to share your experience and knowledge within your firm, with your design community, and

beyond. Host a webinar or lunch ‘n learn, attend a conference, connect with the SEI Sustainability Committee, or reach out to manufacturers and policy-makers.

Provide a narrative about how you plan to share knowledge and data to accelerate adoption of embodied carbon reduction. *

We actively share our knowledge by participating in and presenting at conferences focused on embodied carbon and sustainable design. Beyond formal presentations, we prioritize open dialogue with colleagues across the industry to exchange insights on which strategies have been most effective. By sharing both successes and challenges, we aim to contribute to a collective learning environment that accelerates the adoption of embodied carbon reduction practices across the profession.

Describe the value of SE 2050 to clients. How can we collaborate to drive adoption? At your option, attach any associated marketing materials. *

When speaking with clients, we highlight the value of SE 2050 as a framework that promotes transparency, accountability, and leadership in reducing embodied carbon. We emphasize that partnering with a structural firm committed to SE 2050 means having a design team that is proactively tracking, reporting, and striving for improvement in material efficiency and sustainability.

We often ask clients if they are engaging with other firms aligned with SE 2050, encouraging them to see the program as a valuable industry benchmark. To drive broader adoption, we believe continued client education, clear case studies, and alignment with owner-driven sustainability goals will be key. We welcome opportunities to collaborate with SE 2050 in developing client-facing materials or events to help reinforce the importance of embodied carbon in early project decisions.

Optional: Upload any documents you would like to exhibit.

 Add file

Declare your firm as a member of the SE 2050 commitment on boilerplate proposal language. *

☐ Committed / Completed

☒ Not Committed / Not Completed

ELECTIVES (Not required, recommended to achieve (2) per year):

- ☒ Share your commitment to SE 2050 on your company website
- ☒ Give an external presentation on embodied carbon that demonstrates a project success or lessons learned (Tip: Get connected at a CLF local hub near you!)
- ☒ Discuss with the Owner / Client the option of requiring that some of the structural materials come with facility-specific or product-specific EPDs
- ☐ Share education opportunities with clients
- ☐ Provide a narrative of how you have encouraged industry and policy change incentivizing availability of low-carbon and carbon sequestration materials
- ☐ Start an embodied carbon community of practice or mentorship program in your office
- ☐ Mentor a firm new to the embodied carbon space
- ☐ Other action you feel appropriate and a narrative for why.

Elective Narrative (Optional):

Program Feedback

Please add any comments that you wish to share publicly. The Program Leadership Group is committed to transparently improving SE 2050.

Comments:

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