

EMBODIED CARBON ACTION PLAN (ECAP)

HKS- STRUCTURES
2024



WE AIM TO INSPIRE AND EMPOWER THE PEOPLE AND COMMUNITIES WHO ENCOUNTER OUR WORK. TO PRESERVE AND RESPECT OUR NATURAL RESOURCES, WE CREATE PLACES THAT CONSERVE AND REJUVENATE OUR PLANET, TOO.



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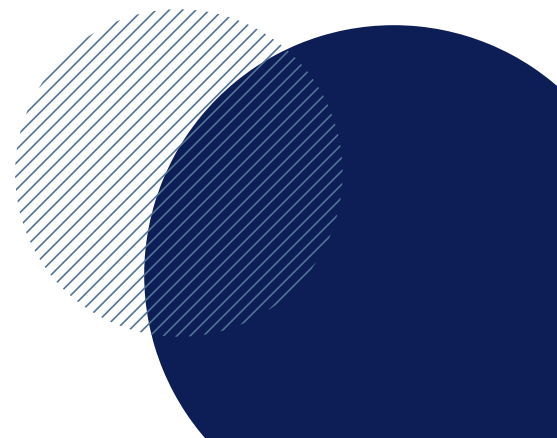
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Executive Summary

Being a signatory firm for SE2050 is an additional opportunity for HKS to utilize our resources and continue to chip away at the carbon pie. We can use this commitment in tandem with our other commitments to dig deeper into truly understanding the numerous facets of sustainability.

With this ECAP, HKS Structures will continue to entrench themselves in the embodied carbon conversations by creating a strategic plan. This plan will focus on four main areas: education, reduction, reporting and advocacy. Within each primary topic, we will provide specific targets. Before we look towards the future, we should reflect on our last year.

Reflections

As we look back on our first year in the SE2050 program, it is a chance to reflect on our successes and note our lessons learned. Overall, we categorize this year as a win. We took on the sustainability learning curve and began training our group to run and interpret LCAs, hosted several sustainability focused webinars, attended numerous conferences with a low carbon focus, and gave presentations to various groups within our firm.

We began to update our specification to include language for low carbon targets, received our first project specific EPDs and upheld these standards through the construction administration process. We got involved with SE2050 on a national level and used our expertise to speak about low carbon concrete in a magazine article. However, even with our positive momentum, there were some missteps along the way from which we learned.



LESSONS LEARNED



No. 01 – Embodied Carbon Action Plan (ECAP)

We have taken a different approach to our ECAP this year. In this year's ECAP, we concentrated on setting more intentional and focused goals than our previous ECAP, while continuing to dream big. Our short-term goals are specific and easily measurable while our larger overarching long-term goals are more abstract with the intent to clarify them along the way. We plan to use our ECAP as a check list for the upcoming year to help us remain focused and become a visual motivator as we complete tasks. With this check list strategy, we must take caution not to become too rigid and miss an opportunity to adjust as needed.



No. 02 – Questions & Assumptions

The conversation surrounding embodied carbon is relatively new. We, as an industry, are still working through best practices, establishing the best baselines, and educating ourselves and peers about new technologies surrounding embodied carbon. With an industry wide task this big and essential, we should not be timid about asking questions. We should be bold and scrupulous with our questions. These questions can be the first step toward innovation.



No. 03 – Persistence & Motivation

We must constantly remind ourselves that net zero embodied carbon is a large long-term goal that needs immediate action. With a task this large, it is easy to become unmotivated, overwhelmed, lose momentum, and become frustrated. This tends to be common when tangible results are not readily available. These are the moments to remember:

"Re-set. Re-adjust. Re-start. Re-focus. As many times as you need to. Just don't quit." - unknown

We have learned it is okay to pause and take a breath. Sometimes it is necessary to take that step back, clarify, and remind people of our goals. Then we can adjust before moving forward. Embodied carbon is a complex subject and only a piece of the overall sustainability pie. Being patient during the education process while being persistent with our targets and standards is crucial.

A low-angle, upward-looking photograph of several modern skyscrapers with glass facades. The buildings are set against a dark, clear blue sky. The perspective creates a sense of height and architectural scale. The text is overlaid on the upper portion of the image.

HKS- STRUCTURES

EDUCATION PLAN

EDUCATION PLAN



HKS Structures' education plan will take a three-prong approach: HKS Structures focus, HKS at large, and education outside of HKS.

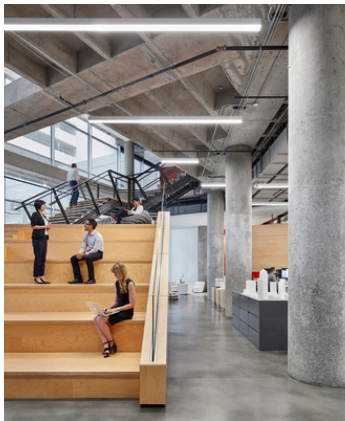
HKS STRUCTURES	HKS AT LARGE	OUTSIDE EDUCATION
<ul style="list-style-type: none"> • Group to become more fluent in sustainability. • One-Page White Papers addressing: <ul style="list-style-type: none"> ◦ Sustainability vocabulary ◦ Abbreviations ◦ Certification requirements ◦ Conversations with architecture. 	<ul style="list-style-type: none"> • Education efforts will center around how the SE2050 commitment ties in and supports our company's sustainability goals. • Aim to align and bolster architecture's sustainability commitments. 	<ul style="list-style-type: none"> • Notify the group when additional resources are available. • Organize resources in a way that is easy to search and incorporate into the design areas.
<ul style="list-style-type: none"> • Hold sustainability presentation once a quarter to: <ul style="list-style-type: none"> ◦ Highlight new information & technology ◦ Provide updates on group's effort to provide transparency 	<ul style="list-style-type: none"> • Provide project specific reports and design team specific review (6 Minimum) • Report to provide discussion opportunities for: <ul style="list-style-type: none"> ◦ Project specific sustainability goals ◦ Project lessons learned 	<ul style="list-style-type: none"> • Continue seeking sustainability focused webinars that can help accomplish project goals. • Webinars offered to the entire group.
<ul style="list-style-type: none"> • Address sustainability efforts as part of everyday design process through training during onboarding process and integrate through different phases of projects. 	<ul style="list-style-type: none"> • Hold a minimum of 3 presentations per year to the firm at large during: <ul style="list-style-type: none"> ◦ ESG Week ◦ Sustainability Champions call ◦ End of year events 	<ul style="list-style-type: none"> • Attend industry wide conferences that support our sustainability research. • Gather and distribute conference information to the group at large.



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REDUCTION STRATEGY

REDUCTIONS THROUGH:



SPECIFICATIONS

- Update the remaining material specifications to provide a low carbon specification.
- Update our standard specifications to capture the “low hanging fruit” item such as requiring EPDs.
- Work with our internal ESG department and our specification team to refine the low carbon division 1 specifications.

DATA

- Aim to perform LCAs on a minimum of 50 percent of our major projects.
 - A major project is defined as a project that has a structural fee of at least \$100,000, has issued construction documents, and has spent at least 100 structural man hours within the given calendar year.
 - Within these major projects, we set out to run LCAs in multiple design phases on at least half of them.
- Aim to have at least 3 projects with sustainability considerations in their schematic design narrative.



ALIGNMENT

We will continue to work with our internal Design Green and align our efforts to provide a complete carbon story. We will work in tandem to provide wbLCA to clients to raise owner awareness.

BREAKING BARRIERS

- In our areas of expertise, we aim to further breakdown industry benchmarks into subcategories to:
 - Better understand the carbon impacts in our areas of expertise
 - Find additional ways to reduce embodied carbon
- Continue to work with the industry specific trade partners and external stakeholders to help set standards where information is currently missing.



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REPORTING STRATEGY

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- ▶ This year our reduction strategy is rooted in being more transparent and more visual about our efforts. A large format display will communicate the projects in which we run LCA's on and their embodied carbon number. This display will provide a conversation starter internally and externally about our sustainability efforts and goals.
- ▶ Once a quarter, we will graph the results by market sector and embodied carbon range. These two items are setting the ground works to evaluate our projects against external and internal benchmarks.
- ▶ Our intent is to contribute 10 projects to the SE2050 database from the 2024 calendar year.

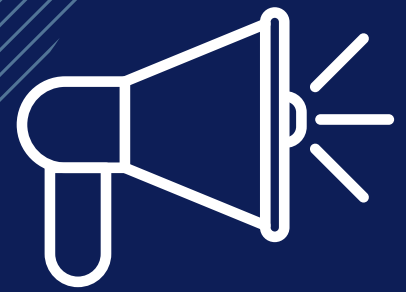




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ADVOCACY PLAN

ADVOCACY PLAN



Our advocacy plan is our all-encompassing component. We will utilize our education plan, reduction strategy and our reporting strategy as ways to advocate.

The message is simple- we must reduce, even though the path forward may not be. The best way to advocate is through education, followed by a strong, easy-to-follow strategy. We want to provide advocacy not only through words, but through actions.

By providing accessible white papers, we are bringing decision makers into the fold and encouraging them to be part of sustainability conversations.

With the various strategic levels of reduction we aim to provide, we can meet individuals where they are and invite them to join us, all while comfort zones are pushed.

By publicly displaying our sustainability actions, we are showing our progress while openly holding ourselves accountable for what has been accomplished. We are encouraging conversations about our status, process, and next steps.

To HKS Structures, advocacy is more than a checked box on our ECAP. It is entwined in every step of the process as we continue to press for lower embodied carbon and refine our industry standards.

