Embodied Carbon Action Plan 2024

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Over the last year, Hollingsworth Pack has worked to ensure that our goals were met from the 2022 Embodied Carbon Action Plan (ECAP). We also plan to continue and educate employees in the following years by:

1. Here at Hollingsworth Pack our champion has worked to educate our team on calculating embodied carbon throughout their design. Through the materials we provided, our team is able to better understand embodied carbon and how to incorporate it into our projects.

2. To further track our embodied carbon, we will train our BIM team to use programs that will calculate the embodied carbon through programs such as REVIT. This will then be compared to calculations from our engineers so we can accurately design our projects in the first phase.

3. Our team will present to new and existing clients our commitment to SE 2050 and show the impact of embodied carbon. We will also show clients the embodied carbon produced outside of materials, such as transport and fabrication.

4. The champions here at Hollingsworth Pack will engage with the CLF Regional HUB and bring any information learned back to our team and other offices.

Lessons Learned: Presenting materials to those in office was pivotal to get those engaged with embodied carbon research. With leadership engagement, we plan to have more office members apart of SE 2050.
Reporting

Milestones 01
Measure embodied carbon on each project since joining SE 2050.

Milestones 02
Provide hand written calculations to compare to LCA tools in REVIT.

Milestones 03
Hold meetings to provide examples of LCA calculations and how to use different tools.

Milestones 04
Continue to work closely with contractors to provide accurate LCA analysis.

During 2023, we continue to develop our carbon tracking process. Our projects included in the SE 2050 database include a variety of ways in which embodied carbon is calculated.

In this year submissions, we plan to submit two projects that used different materials than those submitted the previous year. In 2024, we plan to refine our carbon tracking process to better account for uncertainties, such as material estimates. One way we plan to do this, is to update our company templates to include material properties in Revit. We also plan to submit a minimum number of five projects to the SE 2050 database.
Reduction

This year we plan to achieve tracking embodied carbon for project representing 5% of our revenue. This will help us identify trends in embodied carbon reduction and choose which buildings have the best opportunities to reduce embodied carbon. Here are other ways we plan to reduce embodied carbon:

1. Track embodied carbon for projects that represent at least 5% of our structural engineering groups revenue.

2. Incorporate data visualization into our 2024 embodied carbon projects. This will help our clients, contractors and designers better understand how to track embodied carbon and help spot patterns across projects.

3. Our team will develop a workflow to incorporate into our design in order to make early decisions based on embodied carbon.

4. We will start to work closely with concrete suppliers in our projects to reduce embodied carbon in a mix design and see what the added benefits and effects.

Lessons Learned: Incorporating embodied carbon into our design is a challenge at times, but with continued experience it has become an easier process throughout the year.
Hollingsworth Pack finds it important to advocate the importance of embodied carbon reduction throughout the design process. With a growing company, we plan to continue sharing that knowledge with the following:

1. Continue to describe our SE 2050 commitment to new clients in our Denver and Salt Lake City offices and collaborate as closely as possible with those offices to reduce embodied carbon.

2. Start to engage with material suppliers to communicate the importance of Environmental Product Declarations (EPDs) and the use of low carbon material options.

3. Continue to provide educational resources to our team. Provide presentations, life cycle assessments and the importance of collaboration with clients and each other to reduce embodied carbon in projects.
Our Team

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Embodied Carbon Champion

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Who We Are

Hollingsworth Pack is a growing company of engineers that work independently as professionals in our local communities and contribute globally to international clients through our organization and offices. Here at the Pack we rely and support each other. We respect our colleagues professionalism and contribute to goals that we will reach together. We support the advancement of technology, and, through our internship program, give aspiring engineers support and knowledge to use in their future endeavors.