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# Introduction

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**Every day, the work we do impacts our clients, teaming partners, coworkers, and our communities.** We view this as both an opportunity and a responsibility to make life better for those around us. Mead & Hunt's founder, Daniel Mead, was well-known for his stance on ethical engineering; a strong moral obligation to the communities we serve has been a part of our legacy since our founding nearly 125 years ago. This legacy still guides our actions today.

We are aware of the effect the built environment has on climate change, and we are committed to working with clients on education, awareness, and successful projects that aim to reduce operational and embodied carbon emissions.

Throughout a project's lifecycle, we ask ourselves critical questions: Does what we do every day serve our purpose of shaping the future by putting people first? Do we put people first in our internal business practices? Is our work focused on creating sustainable and responsible solutions? How are we incorporating broad-scale solutions that address climate change? Are we doing the right thing?

We strive to focus on environmental responsibility, with an emphasis on carbon and water-use reduction, by lessening the impact of our corporate offices and our project work. As one of the top 100 design firms on Engineering News-Record's Top 500 Design Firms list, we want to be a leader in positive, transformative change as we address challenges related to climate change.

In addition to becoming an SE 2050 Commitment signatory, our initiatives to meet our sustainability and environmental responsibility corporate goals include:

- Publishing the company's Environmental, Social, and Governance (ESG) report in 2023
- Becoming an AIA 2030 Commitment signatory
- Sponsoring national Carbon Leadership Forum (CLF) research since 2019

# Commitment Letter

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## LETTER OF COMMITMENT TO THE SE 2050 PROGRAM

**DATE:** August 28, 2023  
**TO:** Laura Champion, Director, Structural Engineering Institute  
**FROM:** Jeff Mason, Vice President, Mead & Hunt  
**SUBJECT:** Letter of Commitment to the SE 2050 Program

Dear Laura:

Mead & Hunt, Inc., a firm with more than 1,200 employees whose corporate offices are located in Middleton, Wisconsin, is hereby signing on to the SE 2050 Commitment Program. We support the vision that all structural engineers shall understand, reduce, and ultimately eliminate embodied carbon in their projects by 2050.

Mead & Hunt, Inc. has well-established core values of taking care of people, doing the right thing, and doing what makes sense. The SE 2050 program meets all these core values. We are committed to shaping the future by putting people first. Reducing and eliminating embodied carbon just makes sense for putting people first and protecting the future of our communities.

We therefore commit Mead & Hunt, Inc. to take the following steps which are part of the SE 2050 Commitment Program:

- Within six months and annually henceforth, we commit to reporting an Embodied Carbon Action Plan (ECAP) and permit the ECAP document or form be made public on the SE 2050 website.
- Within one year and annual henceforth, we commit to submit data to the SE 2050 project database in a collaborative effort to understand embodied carbon in structural engineering projects and to set attainable targets for future projects.

We look forward to joining this coalition and industry effort to achieve the goals of the SE 2050 Program.

Sincerely,  
MEAD & HUNT, Inc.



Jeff Mason, PE  
Vice President



# Internal Announcement

## SE 2050 Signatory Station Post



Mead & Hunt’s intranet, The Station, is our primary source of news, general information, and key resources at the company. This platform also helps us connect and network with each other. All employees are expected to check the Station once a day.

**As part of the SE 2050 Commitment, we announced becoming an SE 2050 signatory on The Station on December 20, 2023.**



December 20, 2023

We are excited to announce that we have become a [Structural Engineers 2050 \(SE 2050\)](#) Commitment signatory. Please read our most recent news and share with others.

Similar to AIA 2030 Commitment which focuses mainly on decarbonizing the built environment from operation emissions (electricity and natural gas), the SE 2050 Commitment aims to reduce and ultimately eliminate the embodied carbon of the structural systems in projects by 2050. We have been reporting embodied carbon for AIA projects designed in 2022 and 2023 already (although not required), and therefore the effort of participating on this additional commitment doesn’t add much time and effort. We have committed not just to be market leaders but offer our clients the best service possible by keeping ourselves up to date with a fast-evolving building market and materials, as well as local, state, and federal embodied carbon reductions regulations. Reducing carbon emissions requires knowledge, innovation, and collaboration among all design teams, not just “the structural engineers.”

Our next step is to work on our Embodied Carbon Action Plan (ECAP), where we will outline our company plan to meet the commitment and we will track our progress annually. Then we will begin a targeted in-house training program for our Structural Engineers to understand our projects baselines and where we can target reductions, starting within our Architecture and Building Engineering (ABE) Group and then to all Groups with vertical work. Currently the SE 2050 is targeting vertical structures, our intention is to also include our transportation and other site concrete projects in the future.

If you are interested in being part of the leading effort, and want to get involved, please contact: Victoria Herrero-Garcia. We might start an Embodied Carbon working group if there is enough interest (again, not just structural engineers, open to all disciplines).

Please see below for some great resources from SE 2050.

[Top 10 Things Every Structural Engineer Should Know about Embodied Carbon – SE2050](#)  
[SE 2050 resources: Resources Overview – SE2050](#)

# Embodied Carbon Champion

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**Victoria Herrero-Garcia**  
LCA in Construction Specialist  
Embodied Carbon Leader

**Location:** Durango, CO (remote, reporting to Middleton, WI office)

Victoria Herrero-Garcia is Mead & Hunt’s embodied carbon champion. She has 18 years of experience working with clients to develop and implement sustainability strategies, with an emphasis on low-carbon materials. She performs whole-building lifecycle assessments (WBLCA) and informs design teams on the best embodied carbon reduction strategies for their projects.

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## Education Plan

### Engaging Our Team

Mead & Hunt is a full-service architectural and engineering firm that has been serving clients for more than a century. Key markets include aviation, food and beverage, transportation, renewable energy, water, education, and federal. The firm has more than 1,300 engineers, architects, sustainability consultants, planners, and support staff in more than 50 offices nationwide. See map on following page.

Most of our structural engineering team doing vertical work is aggregated in our Architecture and Building Engineering (ABE) group and mostly located in four states. Since 2021, our embodied carbon champion, Victoria Herrero-Garcia, and our National Sustainability Practice Lead, Kevin Flynn, have engaged with our architectural and structural teams to educate them on embodied carbon reduction strategies on a project-by-project basis.

We will maintain this process to engage and educate our team, as we have identified this method as more efficient than conducting a “per office” engagement process due to our firm’s unique size and the breadth of markets served.

Additionally, our structural engineering team will continue to receive regular embodied carbon content refreshers during weekly scheduled team meetings, offering the opportunity to exchange ideas and discuss new technologies and project success stories.

### Providing Educational Opportunities

Training and education are strong pillars of Mead & Hunt’s culture and are what set us apart from competitors. We offer career training opportunities that allow our staff to progress their career paths and provide the needed skillset to work on interesting and challenging projects.

Our employees have access to the “Embodied Carbon: What is it and why does it matter” webinar provided by Kevin Flynn and Victoria Herrero-Garcia via MyMHU, our digital continuing education platform. As part of the SE 2050 Commitment, Mead & Hunt will include this webinar as part of the onboarding curriculum for the new structural engineer hires starting in 2024.

### Fostering Embodied Carbon Reduction Expertise

We have been actively engaged with the Carbon Leadership Forum (CLF) since 2019, and we are committed to expanding our relationship with the organization. Victoria Herrero-Garcia is the co-founder and co-chair of the CLF Rocky Mountain Hub, where she dedicates her time and expertise to organizing presentations and panels and working with peers on educating the AEC industry on embodied carbon reduction strategies.

At Mead & Hunt, we notify our staff of external carbon emission reduction educational opportunities, including webinars, presentations, and working sessions via our intranet.



# Nationwide Locations

**Arizona**

Scottsdale

**Arkansas**

Batesville

**California**

Ontario  
Sacramento  
Windsor (Santa Rosa)

**Colorado**

Denver

**District of Columbia**

Washington, DC

**Florida**

Fort Myers  
Orlando  
Port Orange  
(Daytona Beach)  
Tallahassee  
Tampa

**Georgia**

Peachtree City (Atlanta)

**Illinois**

Chicago  
Peoria  
Warrenville

**Indiana**

Indianapolis

**Maine**

Portland

**Maryland**

Columbia

**Michigan**

Indian River  
Lansing  
Livonia (Detroit)  
Marquette  
Norway

**Minnesota**

Bloomington  
(Minneapolis)

**Missouri**

Fenton (St. Louis)

**North Carolina**

Raleigh

**North Dakota**

Bismarck  
Fargo

**Ohio**

Cincinnati  
Columbus

**Oklahoma**

Tulsa

**Oregon**

Portland

**Pennsylvania**

Harrisburg  
Philadelphia

**South Carolina**

Lexington  
Myrtle Beach  
North Charleston

**South Dakota**

Rapid City  
Sioux Falls

**Tennessee**

Nashville

**Texas**

Arlington  
Austin  
Dallas  
San Antonio

**Virginia**

Herndon  
Richmond

**Washington**

Seattle

**West Virginia**

Charleston

**Wisconsin**

De Pere (Green Bay)  
Eau Claire  
La Crosse  
Middleton (Madison)  
Waukesha  
Wauwatosa (Milwaukee)  
West Allis

# Knowledge Sharing

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Mead & Hunt announced becoming a SE 2050 signatory in late December 2023 via our [website](#) and social media accounts including LinkedIn. We have a robust marketing and communication program aimed at engaging with clients, partners, and potential new hires.

Our content calendar includes sharing case studies and project highlights, key company announcements, tradeshow and conference attendance, and employee recognition efforts. We will leverage this program to publicize case studies on embodied carbon work.

## Collaborating with Design Teams on Embodied Carbon Reduction Strategies

As part of our AIA 2030 Commitment, we conduct an embodied carbon kickoff meeting in the early stages of design for every project where Mead & Hunt is the architect of record and the structural engineer, and the project exceeds 10,000 square feet. During this meeting, we educate the team on what it means to reduce carbon emissions from the materials we use in our projects and discuss structural elements with the highest embodied carbon impacts and possible reduction strategies.

For projects where Mead & Hunt does not provide the structural engineering services, we are mentoring other structural engineering firms on the SE 2050 Commitment, as well as sharing our knowledge in overall embodied carbon reduction strategies, specifications, etc.

## Success to date

In April of 2023, Mead & Hunt participated in a [USGBC Decarbonization Summit](#) panel discussing how the industry is moving decarbonization forward. Our participation involved presenting three embodied carbon reduction case studies. We acknowledge that active and fast-paced embodied carbon reduction will not be accomplished without collaboration and knowledge sharing.

Mead & Hunt has collaborated with the Colorado Office of the State Architect as a peer-reviewer for the Buy Clean Colorado (BCCO) Act documentation requirement process. The [BCCO Act](#) is focused on reducing the embodied carbon emissions generated during the production stage. Embodied carbon thresholds for specific materials, including structural, were published in 2023, and the mandatory compliance period started in January 2024.



# Reduction Strategy

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## **Mead & Hunt will focus on tracking and reporting the impact of our structural building designs in our first year as a SE 2050 Commitment signatory.**

Our team will develop an overall embodied carbon baseline from the results of the reported projects, establishing a carbon intensity ( $\text{KgCO}_2\text{e}/\text{m}^2$ ) baseline not to be exceeded in future projects. We will start defining our long-term reduction timeline and optimization strategies in next year's ECAP, and it will be updated on an annual basis.

Mead & Hunt is actively engaging and educating clients to pursue International Living Future Institute's (ILFI) Zero Carbon certification when a project already has an electrification and/or decarbonization goal. Mead & Hunt provides WBLCA for all projects over 10,000 square feet pursuing LEED.

Whenever possible, our projects leverage building reuse which includes portions of the structure and building enclosure. We are continuously investigating ways to promote circular economy by researching available structural steel from reuse or surplus.

## **Success to Date**

For the past two years, we have been including embodied carbon requirements into our specifications and requesting action submittals for Environmental Product Declarations (EPDs) and a calculator, which includes as-built material quantities and Global Warming Potential (GWP) thresholds. These projects are currently in construction administration phases, and we are collecting documentation and will be able to report our learnings in the next ECAP update.

# Reporting Plan



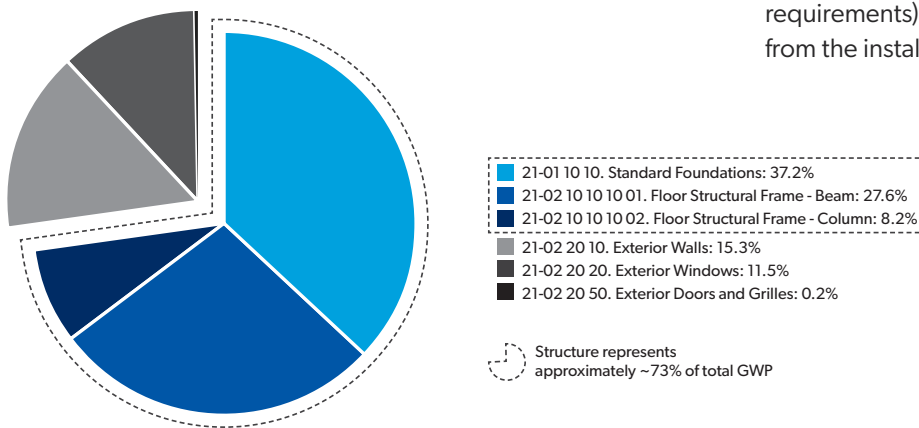
Appleton International Airport Concourse Expansion; Appleton, WI

Mead & Hunt is committed to reporting three to five projects per year, at a minimum.

We use One Click LCA to calculate embodied carbon reductions at any stage of design. We have several ways of calculating the embodied carbon of structural materials:

1. We are using Carbon Designer (by One Click LCA) for early stage/concept design conversations. These calculations and results are very broad and although they include numerous assumptions, they do provide a “big picture” assessment of where the major structural embodied carbon contributors are.
2. For early schematic design, when a Revit model has not yet been developed, our structural engineer is providing quantities which are added manually to One Click LCA, and industry-wide EPDs are selected to determine the total project GWP.
3. When there is a Revit model, quantities are extracted from the model and verified with drawings during different stages in design.
4. For the final as-built quantities, we rely on the general contractor to provide a completed “Environmental Impact Calculator” (part of the specifications submittal requirements) which includes quantities as well as EPDs from the installed materials.

## Global warming kg CO2e - Classifications



Depending on the purpose of the embodied carbon analysis, our system boundary is cradle-to-grave, per LEED guidance; otherwise, we do cradle-to-grave and include the A5 lifecycle stage. One Click LCA allows us to run calculations for both scopes simultaneously.

## Lessons Learned

Mead & Hunt is committed to hosting lessons learned sessions to educate our staff and clients on the success of our embodied carbon reduction strategies.

