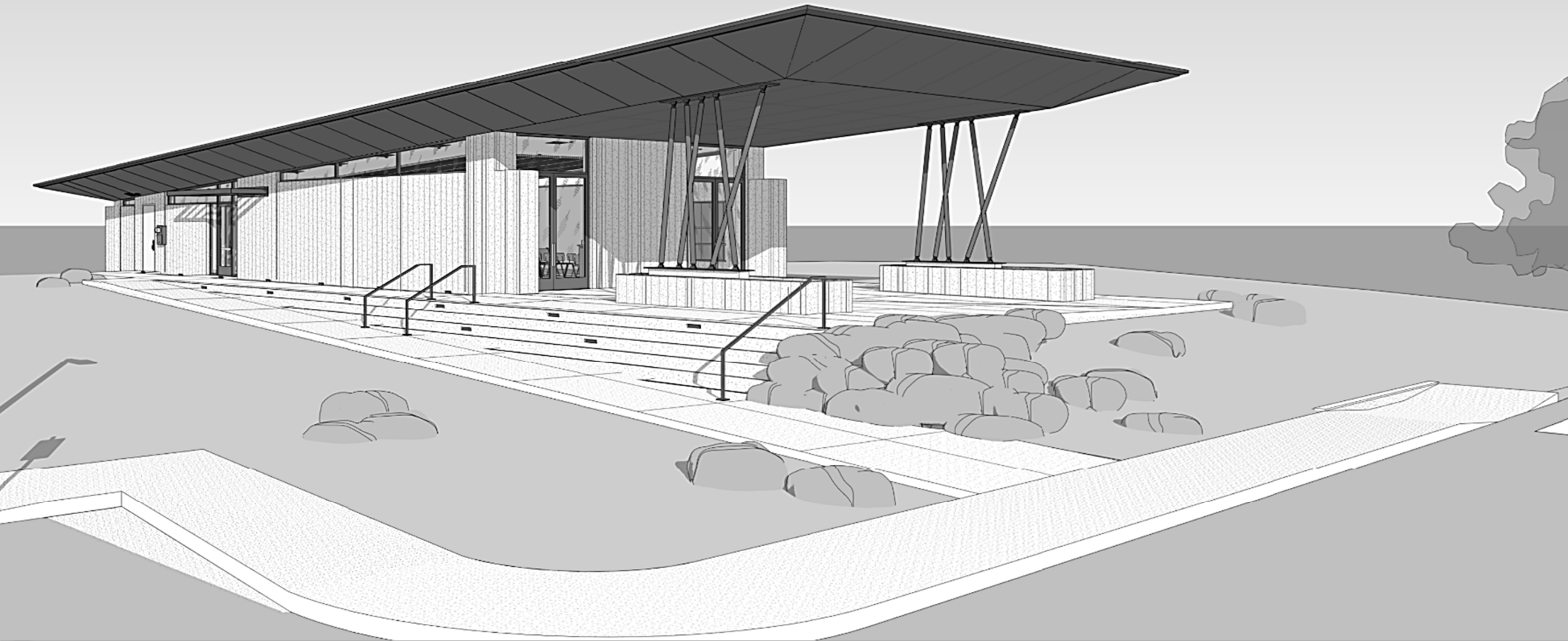




# 2026

## EMBODIED CARBON ACTION PLAN

SE 2050 Commitment Program



## BACKGROUND

Linchpin Structural Engineering, Inc. (Linchpin) is an actively participating member in the SE 2050 Program and its collaborative effort of understanding and reducing our industry's impact on the environment. As a component of our participation in that program, the Linchpin sustainability committee produces an annual Embodied Carbon Action Plan (ECAP). In each year's ECAP, we lay out a series of long- and short-term goals and a defined action plan to meet them. Our goals and efforts are focused in four main categories: Education, Reporting, Reduction, and Advocacy.

This document does not provide overall background information on the SE2050 initiative or the basics of embodied carbon - for more comprehensive background information, please refer to Linchpin's inaugural 2022 ECAP, which provides significantly more detail.

## CURRENT ACTIVITY

### EDUCATION

This section notes the efforts undertaken to further Embodied Carbon education among sustainability committee members as well as all Linchpin employees.

*Current Year Education Highlight:* Linchpin sustainability champion Eric R. attended the SE2050 conference in Boulder to engage with other members of the community and learn more about the current state of the initiative and new developments. He also joined the SEI/ASCE SE2050 Committee, attending meetings and working with others to support the project's goals and to further his education in the embodied carbon space.

### *Ongoing/Annual Initiatives:*

- Update Linchpin's employees on our accomplishments and status of last year's goals.
- Attend conference sessions and webinars regarding embodied carbon and sustainable construction practices when available and share resources with firm.

### *Current Year's Initiatives:*

- Obtain LEED Green Associate Status for all Sustainability Committee members.

## REPORTING

This section notes the work completed regarding documenting and reporting the embodied carbon and GWP for our designs.

### *Current Year Reporting Highlights:*

This year, using the new SE2050 database reporting options, we submitted four projects and compared them to the available distribution metrics:

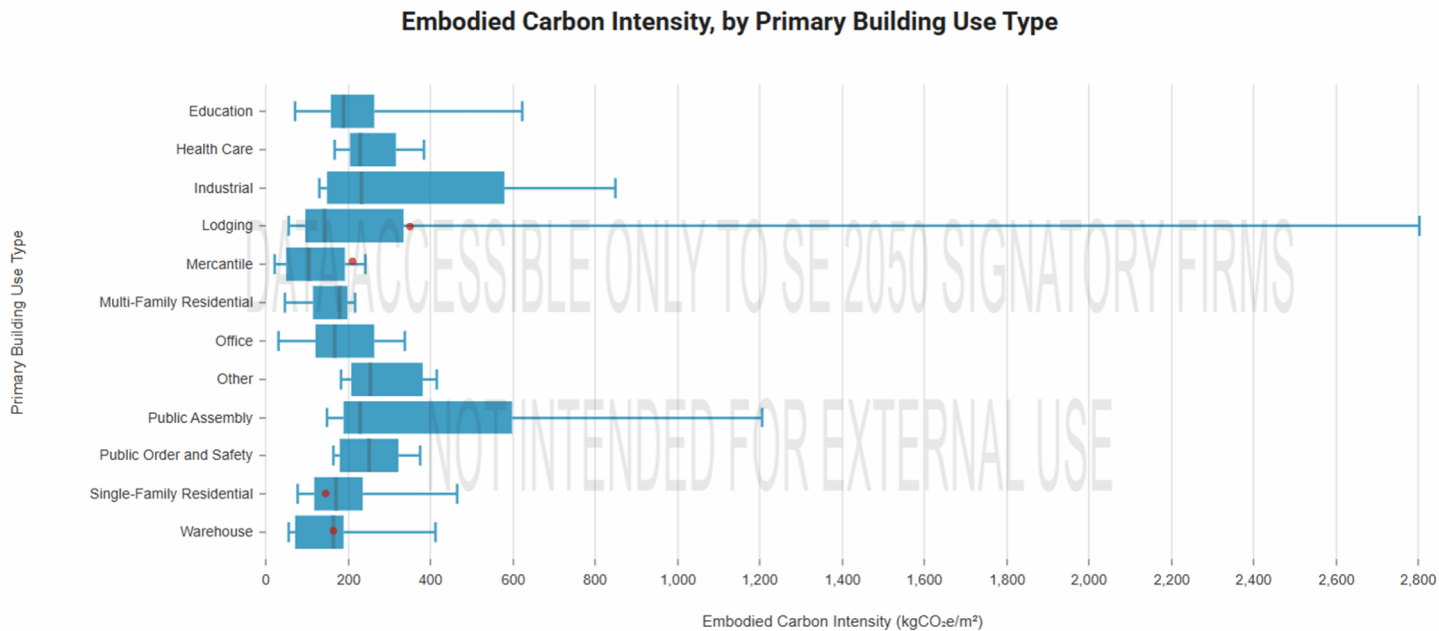


Figure 1: Screen capture of Available Project Carbon Intensity (SE2050)

The chart shows that Linchpin's projects are variable in their relative performance; our warehouse and single-family projects tallied near the average of available projects, while our Lodging and Mercantile projects were in the upper quartile of carbon intensity. The mercantile project is located in a high snow, high seismic region, and is a single-story structure, which likely

contributes to its relatively high carbon concentration. The lodging project is a multi-story concrete hotel tower; while we can't be sure, it seems likely that many of the lodging projects in the database are light-framed construction, naturally resulting in lower embodied carbon concentrations.

Because the historical project data is not yet available on this platform, and some of the collected data categories are new, there is not sufficient data yet to draw conclusions regarding trends. We hope to be able to begin drawing conclusions regarding trends based on our own internal data beginning next year, when we will have been collecting data on project GWP for five years.

#### *Ongoing/Annual Initiatives:*

- Mandate (1) project GWP takeoff per employee in the coming year, to reduce workload on data gathering for reported projects.
- Develop in-house project database for comparing project GWP data to seek reduction opportunities.
- Develop and implement a GWP reporting 'widget' for inclusion on the specifications sheet of all projects company-wide that includes the overall GWP data and some comparison values, i.e. 'this project's carbon emissions equate to XXX round trip flights from LA to NYC' to help develop carbon literacy for clients and contractors interacting with our plans.

#### *Current Year's Initiatives:*

- Initial data collected appears to indicate that we are documenting consistent GWP intensity data across our projects, which will help us establish company-wide benchmarks and ensure accurate takeoffs between all designers as we work to reduce our designs' carbon intensities. With our five-year anniversary of SE2050 involvement this year, we will review all our historic data and begin drawing comparisons and examining trends, to create a more data-driven approach to future initiatives.

## **REDUCTION**

This section discusses our progress with reducing the embodied carbon content of our designs.

*Current Year Reduction Highlight:* Linchpin sustainability team members worked with other designers to trial multiple design approaches for a mat slab to ensure the most efficient design with a minimized embodied carbon load was used. Our team also worked to maintain employee awareness and consideration of embodied carbon during design, advocating for our designers to avoid ‘throwing concrete’ at designs and working to use efficient systems consistently.

*Ongoing/Annual Initiatives:*

- Work with suppliers to advocate and understand their capacity to provide concrete mixes designed to reduce embodied carbon and familiarize ourselves with the Environmental Product Declarations of manufacturers.
- Explore options for low carbon construction materials.
- Continue to standardize Revit material libraries for quick, seamless carbon takeoffs for reporting.

*Current Year’s Initiatives:*

- Advocate for mass timber construction on appropriate projects to gain exposure and boost exposure of that construction approach, which is uncommonly adopted in our area.

**ADVOCACY**

This section addresses our efforts to advocate for sustainable design efforts, both within our company and in the broader community.

*Current Year Advocacy Highlight:* As we all know, bureaucracy moves slowly, but ongoing coordination is continuing between Linchpin, the Contractor’s Association of Truckee Tahoe, and local building departments to develop coordinated approaches to sustainable design. While this process will take a long time, we firmly believe that partnering with the permitting authorities to enact enforceable standards is the best path toward more universal adoption of sustainable construction approaches.

*Ongoing Initiatives:*

- Continue to seek opportunities to discuss sustainability requirements with local governments and shift to a more proactive approach of lobbying for new sustainability requirements in jurisdictions.

- Develop a project management plan for use on all projects that includes basic sustainability checks and goals.
- Connect and coordinate with the American Institute of Architects North Nevada (AIANN) chapter's Sustainability Committee.

## **ONGOING INITIATIVES**

This section summarizes several practices and efforts that will be considered generally ongoing, as opposed to time-restricted and/or completion-oriented. These initiatives will be the focus of our education for all Linchpin employees with the goal of standardizing sustainability-oriented mindsets and practices.

### *Ongoing Initiatives:*

- Seek out and prioritize participation in LEED projects.
- Advocate for wood construction and partially grouted CMU walls.
- Economize concrete designs to minimize embodied carbon by leveraging concrete strength and minimizing overdesign.
- Collaborate with project design teams to implement designs that reduce embodied carbon emissions.