

Structural Engineers 2050 Commitment Initiative

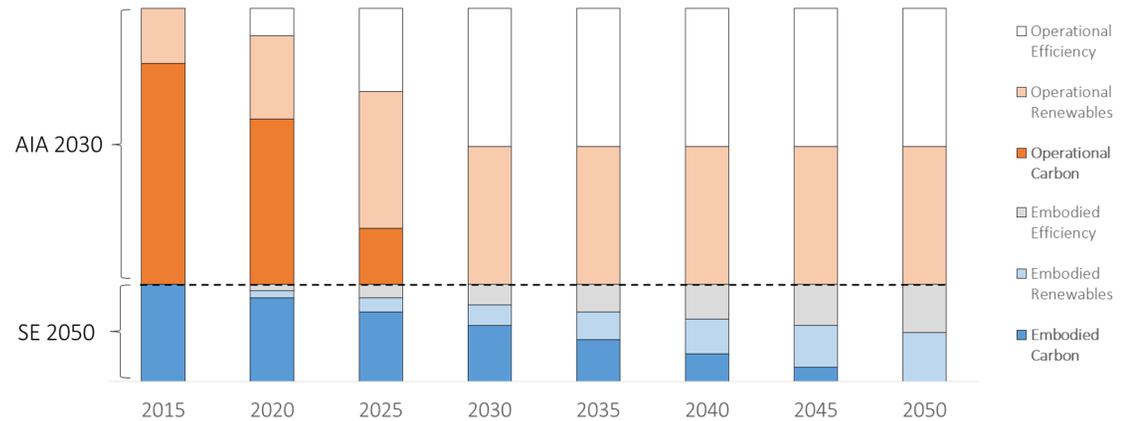
Structural engineers have an important role to play in reducing greenhouse gas (GHG) emissions from the building sector, yet sustainable design has traditionally been the realm of the architect and other design team members. However, structural materials contribute to at least 40% of the carbon embodied in a building, and the new call to move towards a zero carbon built environment includes embodied carbon as a significant contributor to the building sector's impact on global climate change.

The Paris Climate Agreement set a new target: to keep global temperatures from rising above 2°C and avoid catastrophic, irreversible climate change. To meet this goal, the building sector must be carbon free by 2050.

The goal of the *Structural Engineers 2050 (SE 2050) Commitment Initiative*, originally developed by the academic research group the Carbon Leadership Forum, is to **inspire structural engineers** to contribute towards the global vision of Zero Carbon buildings by 2050, and to **provide measurement of progress** towards that vision.

Much like the **AIA 2030 Commitment** does for operational energy in buildings, this SE 2050 initiative will **challenge structural engineers to meet embodied carbon benchmarks and increasingly higher reduction targets** in a "race towards the most efficient building" as we approach the year 2050.

SE 2050 + AIA 2030



2018 SEI Sustainability Committee

SE 2050 Contributes to the **SEI Vision for the Future** by:

- Demonstrating leadership and innovation in our industry
- Supporting the future of structural engineering by promoting sustainable design best practices
- Providing a structural-specific environmental call to action that our profession can rally around

SEI is a key partner to champion this commitment because:

- Our members are committed to being stewards of our environments
- The experience and knowledge of our members in real world applications make them invaluable in shaping the initiative
- Our coalition of structural engineers are critical in outreach to the profession
- The initiative will broaden the purpose of structural engineering for current and future generations
- The institute is a platform for training and skill development that promotes innovation towards meaningful contributions to society