

Strategic Plan

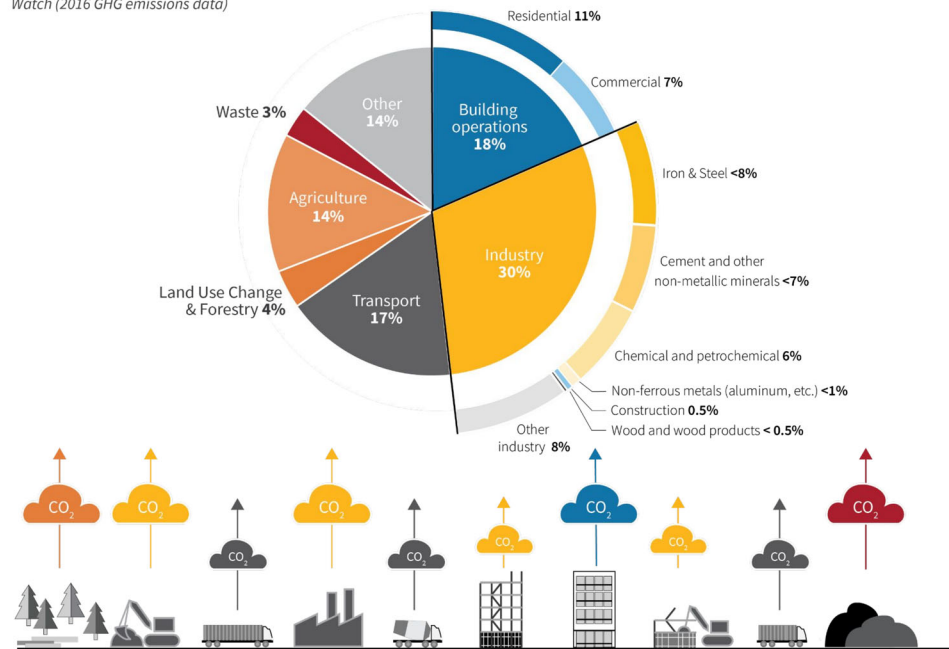
2023-2026



Further, Faster, Together

Global greenhouse gas emissions and the Life Cycle of Buildings

Emissions data from IEA and WRI Climate Watch (2016 GHG emissions data)



When considered over their full life cycle, the building industry influences nearly every major sector of global GHG emissions.

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Since our founding in 2009, the Carbon Leadership Forum has been driving research to better understand the carbon impacts of materials used in buildings and infrastructure.

When we started this endeavor, we expected we were onto something important, but didn't contextualize the scale or nature of the opportunity. "Green building" meant operationally efficient buildings powered by clean energy. Virtually no attention was paid to the materials we used and the emissions that were associated with producing, transporting, installing and disposing them. The topic of "embodied carbon" only fit in the vernacular of a small group of academics and nerdy practitioners, like myself.

As the years progressed, we began producing research that indicated the significance of embodied carbon. And while we did it, that community of carbon nerds began to grow. Through projects like the developing the first embodied carbon benchmarks for buildings in North America, to the release of EC3, a tool that allows users to quickly compare the carbon footprint of construction materials, we developed a reputation for credible research and resources that help folks understand the importance of embodied carbon and what we can do about it.

Fast forward to today, and we're seeing embodied carbon reductions employed as a mainstream strategy among climate leaders. From large and small architecture firms, material manufacturers, policymakers and others we are seeing the shift we've been preparing for over the last decade. We're excited to see it, and are quickly scaling our research and resource development to enable action today while laying a stronger foundation for action in the future.

We envision a world where buildings are transformed from an existential threat to a true solution to climate change. Our 2023-2026 Strategic Plan outlines critical goals and strategies that we believe will enable scaled action to reduce embodied carbon from buildings and infrastructure. Through this plan and with collective leadership from our many partners, we can make significant progress toward a decarbonized building industry. We hope you'll join us.

Kate Simonen
Founder and Executive Director of CLF

Buildings: A Solution to Climate Change

The Carbon Leadership Forum accelerates the transformation of the building sector to radically reduce the greenhouse gas emissions attributed to materials, or embodied carbon, used in buildings and infrastructure. We research, educate and foster cross-collaboration to bring embodied carbon of buildings and infrastructure down to zero.

Embodied carbon is significant. Buildings are a significant contributor to global climate change, and industrial emissions from creating building materials play a key role.

Embodied carbon is an urgent problem. Due to the limited amount of time remaining before the climate crisis reaches a tipping point, and the tendency for embodied carbon emissions to be “frontloaded,” reducing embodied carbon is urgent.

Embodied carbon is directly linked to public health and equity. Embodied carbon affects human well-being in two ways: (1) directly, through the local health impacts of pollution from nearby industrial manufacturing sites, construction sites, highways (where materials are transported), or landfills; and (2) indirectly, through the myriad impacts of climate change (e.g., extreme weather events, spread of disease, and scarcity of food, water, and other resources).

Embodied carbon can be reduced now. Fortunately, there are many tools and strategies that designers and builders can use now to reduce embodied carbon. The Carbon Leadership Forum works on near and long-term solutions that help reverse climate change.

Mission

Our mission is to eliminate embodied carbon of buildings, materials, and infrastructure to create a just and thriving future.

Vision

We envision a transformed, decarbonized building industry—better buildings for a better planet.

STRATEGIC GOALS

FILL CHALLENGING GAPS

STRENGTHEN LINKS TO ENVIRONMENTAL JUSTICE

PRIORITIZE APPLIED RESEARCH THAT DRIVES DECARBONIZATION

ENGAGE AND EMPOWER BUILDING SECTOR ACTION

STRENGTHEN RESEARCH RIGOR AND COLLABORATION

Prioritize Research that Drives Decarbonization

The Carbon Leadership Forum pursues research that drives decarbonization by addressing the urgent needs of policymakers, architects, engineers, manufacturers, contractors, and owners (building sector actors) acting to reduce embodied carbon through policy and practice.

Our Plan

The CLF will develop applied research that enables building sector actors to prioritize the most impactful strategies to reduce embodied carbon in buildings and infrastructure.

Strategies

- Inform the development of impactful and just policies by publishing research and resources on the most effective and actionable strategies for reducing the embodied carbon of buildings and infrastructure.
- Accelerate the development of robust data collection, benchmarking, modeling, and carbon reporting across the building sector.
- Improve the quality, accuracy, and usability of LCA data, methods, and tools for the building sector to inform accurate measurement and reduction of climate impacts.

Fill Challenging Gaps

The CLF works to fill challenging gaps in embodied carbon knowledge through applied research and collaborative relationships. While known decarbonization strategies are being implemented, we're working to identify new opportunities that enable us to reach necessary decarbonization targets. We're driving foundational research that will enable long-term solutions to be implemented in policy and practice.

Our Plan

The CLF will lead embodied carbon research and resource development by addressing technical challenges and gaps to advance embodied carbon progress.

Strategies

- Pursue innovative and challenging research topics that expand the depth or breadth of embodied carbon knowledge.
- Act as a translator between the researchers/ LCA practitioners/ tool developers/ industries creating data products and the policymakers/ practitioners/ NGOs using LCA data and tools.
- Drive harmonization and build consensus on challenging topics in carbon accounting and policy.

Engage and Empower Building Sector Action

It is essential that building sector practitioners and policymakers are empowered to implement widespread embodied carbon reductions. Accordingly, the CLF has built a network through various engagement forums to work directly with these decision-makers to drive immediate and long-term change across the building sector. And while this community has grown dramatically over recent years, key stakeholders are not yet fully aware, engaged or empowered to act at the scale needed. We're working to mainstream embodied carbon reduction strategies across the building industry.

Our Plan

The CLF supports practitioners and policymakers in measuring and reducing embodied carbon as a standard practice on all construction projects

Strategies

- Increase embodied carbon literacy and build capacity across the building sector.
- Increase adoption of carbon accounting on projects.
- Create spaces for knowledge sharing, collaboration, and mutual aid.

Strengthen Links to Environmental Justice

Centering justice and equity is vital to the impact we seek. Guided by our explicit intention to acknowledge both the social consequences of building design and construction and their carbon footprint, we aim to learn from and proactively include historically underrepresented communities in the conversation, and to join existing initiatives within those groups where our expertise is welcome and useful.

Our Plan

The CLF will work to strengthen links to environmental justice (EJ) and climate justice (CJ) in our work both internally by developing shared conversations and approaches and externally in support of and in consultation with the broader EJ and CJ communities.

Strategies

- Develop shared internal language and strategy concerning links between justice and embodied carbon.
- Improve the structure and process of our research to more thoroughly address EJ/CJ concerns.
- Support and cultivate a diverse community focused on the decarbonization of the building sector.
- Explore how policy and research can integrate EJ, CJ, human rights, biodiversity, and more by collaborating with leading organizations on these types of topics.

Strengthen Research Rigor and Collaboration

A key aspect of the CLF's historic credibility has been our position within the University of Washington, our staff's professional experience in both the building sector and in academia, and our commitment to collaboration. And CLF's unique strength lies in our ability to bring together a range of stakeholders and experts that combine knowledge and experience from academia, government, and industry. The CLF will work to maintain this balance of working both within and across academic and professional silos, while striving to create resources that are useful and high-quality.

Our Plan

The CLF will develop practices and policies that maintain or increase the quality and rigor of our products while also deepening our relationships with academia, government and our networks.

Strategies

- Strengthen relationships with academics working on aligned projects and participate actively in the academic community.
- Strengthen relationships with university, nonprofit and government agencies who develop and implement embodied carbon policies and programs.
- Create broad awareness of CLF's work in support of our mission.
- Create spaces for engagement and growth in the networks that deepen our relationship with a broad cross-section of stakeholders.

Strategic Projects

Here's a peek at what we're prioritizing



Material Baseline Publications

Material baselines help set carbon reduction targets for building materials. We're establishing baseline figures for common construction materials to be incorporated into embodied carbon tools, calculators and policies.



Scaled Action in CLF Hubs

Decarbonization requires collective action. We're building a network of CLF Hubs that work together to drive education, collaboration and action at local levels, across the world.



Novel Material Research

Innovation is needed to build a zero-carbon future. We're researching opportunities for innovative materials and designs to be used as alternatives to current high-emitting construction practices.



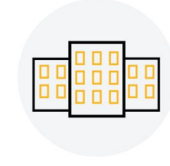
Leadership in Standards Committees

Standards define how embodied carbon is measured and managed. We're bringing technical rigor to "product category rule" committees and others to ensure that emerging standards enable dramatic reductions in embodied carbon.



Whole Building Benchmark Study

We need to know the embodied carbon footprint of typical buildings to set targets and identify reduction strategies. We're leading research to establish typical N. American "benchmarks" and are helping designers and policymakers understand how to prioritize carbon "hotspots" in buildings.



Guidance for Effective Policy Making

Embodied carbon reduction policies must be informed by the best available science. We're developing key resources and providing on-demand strategic support to advance effective and just embodied carbon policies at the federal, state and local levels.



Through research, education and cross collaboration, we can propel innovation to

Build for a Better Planet

