



# EMBODIED CARBON PRACTITIONER'S TOOLKIT

## EMBODIED CARBON 101

These resources introduce the concept of embodied carbon and highlight the critical importance of reducing it.

- [Embodied Carbon 101 Factsheet](#): Understand what embodied carbon is, how it is defined, its significance in the global climate crisis, and why it is an important consideration for practitioners and policymakers.
- [Embodied Carbon Video Training Series](#): Watch this introductory 5-video series to build foundational knowledge on embodied carbon, Life Cycle Assessment (LCA), Environmental Product Declarations (EPDs), and more.
- [AIA-CLF Embodied Carbon Toolkit for Architects](#): Read this three-part resource provides architects with an overview, steps and key strategies to reduce embodied carbon in their projects.
- [CLF Embodied Carbon Toolkit for Building Owners](#): Review this three-part resource provides owners and developers with guidance on setting corporate and procurement policies, and implementing reduction targets across their portfolios.
- [Urban Embodied Carbon Reduction Checklist](#): Use this checklist to explore a range of embodied carbon reduction strategies for your project.

## LIFE CYCLE ASSESSMENT (LCA) & ENVIRONMENTAL PRODUCT DECLARATIONS (EPDS)

Learn the basics and best practices of building-scale life cycle assessment (LCA) and apply practical guidance to measure embodied carbon.

- [Building LCA 101 Factsheet](#): Learn the basics of Life Cycle Assessment (LCA), and methodologies, data sources, and policy guidance for using LCA.
- [Life Cycle Assessment of Buildings: A Practice Guide](#): Follow this step-by-step guide for standardized and accessible guidance on how to conduct an LCA of a building.
- [EPD 101 Factsheet](#): Learn what Environmental Product Declarations (EPDs) are, how they are created, and how to review their specificity and quality.

## BUILDING LCA BENCHMARKING & CASE STUDY RESOURCES

- [The Embodied Carbon Benchmark Report](#): Explore the embodied carbon budgets and analysis of 292 buildings in the US and Canada, and understand the range of typical impacts for buildings across different building characteristics.
- [Embodied Carbon Reductions Built Project Case Study Collection](#): Explore this collection of 13 project case studies that implemented a range of embodied carbon reduction strategies, including low-carbon concrete, mass timber, adaptive reuse, salvaged materials, innovative bio-based materials, and design for material efficiency.

## LOW CARBON MATERIALS RESOURCES

These resources provide a deeper dive into understanding and specifying low-carbon materials in construction.

- [CLF North American Material Baselines Report](#): Read this report for a snapshot of the state of Environmental Product Declarations (EPDs) for North American-produced building materials and estimates of industry-average GHG emissions for those materials. The most recent report is from 2023, with an updated report coming in summer 2025.
- [Model Embodied Carbon Specifications](#): Download and use these open access model specifications that incorporate project requirements for environmental product declarations (EPDs) and global warming potential (GWP) limits for a range of materials and products.

## ADVANCED LCA RESOURCES

Go deeper into advanced LCA methods and principles to support the reduction of embodied carbon in buildings.

- [Canadian Whole Building Life Cycle Assessment Practitioner's Guide](#): Guidance for Compliance Reporting of Embodied Carbon in Canadian Building Construction. Reference this Canada National Resource Council guidance for enabling greater consistency in the methodologies, boundaries and assumptions used in whole building life cycle assessments (wbLCAs). While the requirements in this guidance are not directly applicable to the requirements for compliance under Boston's policy, this is still a high quality resource for practitioners looking to learn more about best practices in building life cycle assessment and how a future reduction requirement might operate. It includes tips and methods around how to model a baseline for comparison and account for reductions.
- [The Beginner's Guide to MEP Embodied Carbon](#) (MEP 2040 and CLF): Learn practical methodologies, material selection strategies, and actionable steps to measure and reduce the carbon impact of MEP systems.
- [Project Life Cycle Assessment Requirements: ECHO Recommendations for Alignment](#): Review the summary of the Embodied Carbon Harmonization and Optimization (ECHO) project's findings on the current state of building LCA standards, policies, and programs and recommendations for alignment.
- [Advancing the LCA Ecosystem](#): Discover a roadmap for an ideal LCA ecosystem that drives decarbonization and work to advocate for this future. This resource also includes an overview of major standards and guidance documents for buildings, as well as for products and infrastructure projects.

## OTHER HELPFUL RESOURCES

- Join the [CLF Boston/Northeast Hub](#) local volunteer-led community
- Attend the [CLF Hub NYC/Northeast free LCA Tool User Group](#) discussions
- Follow and ask questions on the [CLF Community Forum](#)

Have questions? Contact: [igbc@boston.gov](mailto:igbc@boston.gov)