

# Embodied Carbon Reduction (assessment/estimate) Case Study Template

These case studies are intended to be a resource for sharing successes and challenges of using LCAs, as well as other assessment methods, as a tool for reducing embodied carbon. The aim of these case studies is to:

1. Explore how LCAs, and other assessment methods, are or are not influencing design or the built project
2. Provide more nuanced information than is available through data obscure benchmarks
3. Demonstrate how a range of assessment methodologies can be used to influence design or the built work

It is the responsibility of the individual filling out this template to ensure the information provided is accurate and client permission has been granted if needed. These case studies are intended to be available on the CLF NE website. **Below is a summary of the information you could include in your case study:**

## Project Information

- Name of Project:
- Building location (City, State):
- Primary Building Use Type:
- New building or Renovation project:
- Construction Year (or Anticipated):
- Gross Square Footage (ft<sup>2</sup>):
- Expected Building Life (years):
- Green building certification:
- Project Team (e.g. Developer, Architect, Engineer, Builder etc.):
- Project images, model screenshots or renders if possible

## Assessment information

Describe the design team's embodied carbon calculation methodology.

- Was an assessment performed? Yes/No
- What Project Phase(s) was the assessment conducted?
- Who performed the assessment?
- Please identify the Tool/Software used
- What data sources were used?
- What life cycle stages were Included?
- Was biogenic storage included? Yes/No
- What was the scale of the assessment?
- What physical parts of the building did the assessment include?
- Significant LCA Assumptions and Uncertainty
- What is the cost of performing this assessment? (\$)
- Who paid for it?

## Describe the assessment and its intent

Narrative form. (100 words recommended maximum)

### Assessment Results Table

If this cannot be completed then leave this section blank. If the data does not nicely fit in this format then please upload the file.

Scenario	A (kgCO <sub>2</sub> e/unit of assessment)	B (kgCO <sub>2</sub> e/unit of assessment)	C (kgCO <sub>2</sub> e/unit of assessment)
1			
2			
3			
4			
5			

### Assessment Results

Narrative (100 words max) and/or Graphic. Ideally in graphic form. If no assessment was performed, qualitatively estimate impact.

### How were the results communicated?

Narrative form. (100 words recommended maximum)

### What influence did the analysis have on the project?

Narrative form. (200 words recommended maximum)

### Please select all carbon reduction strategies attempted and their level of success

(High, Medium, Low success, Attempted but not successful, Applicable but not attempted, Not applicable to project)

Descriptions of each strategy can be found at <https://carbonleadershipforum.org/ec-checklist-template/>

### Please provide more detail into the most important embodied carbon reduction strategies you identified as considering in the previous question.

Narrative form. (200 words recommended maximum)

### Key Findings, Recommendations, and Lessons Learned

Narrative form. (200 words recommended maximum)

Describe the team's key findings, recommendations, and lessons learned. For example:

- What strategies were most effective in reducing embodied carbon?
- Which were less effective, or tried but without success?
- Did the project run into any embodied carbon-related challenges/data gaps/tool challenges/material availability during design or construction? How did the project team address these challenges?
- Did the assessment have an impact on design or construction cost or schedule?