

INTENT

To minimize projects' embodied carbon through design as well as to offset projects' climate change-related construction impacts.

REQUIREMENT

The project must account for the total embodied carbon impact from its construction through a one-time carbon offset purchased from an approved carbon offset provider.

CHANGES IN 3.1

Removal of the Living Carbon Exchange due to the complexities of navigating a shifting global market.

CLARIFICATIONS

Clarifications do not typically require additional documentation. They explain nuances of the established intent and requirements and have been divided into requirements clarifications, general clarifications and specific clarifications.

REQUIREMENTS CLARIFICATIONS

Clarifications regarding what teams are required to do to achieve this Imperative.

BASIC REQUIREMENTS

To meet this Imperative, project teams should incorporate carbon reduction strategies in the design phase. The project team must then use an approved calculator to determine the project's construction-based embodied-carbon footprint and purchase Certified Emission Reductions (CERs) or Verified Emission Reductions (VERs) from an acceptable Green-e Climate (or equivalent) verified program to offset 100% of that footprint.

CALCULATION REQUIREMENTS

Calculations must include total embodied carbon from final construction materials and processes.

Renewable Energy Systems

The carbon "cost" of all renewable energy systems must also be included in the calculation, but the renewable energy produced by those systems cannot be part of the offset calculations. If the calculator used does not explicitly include the embodied carbon of renewable energy systems, the team must separate out the embodied carbon of their renewable energy system and add it to the total. Unless there is more accurate information available from the panel manufacturer or a relevant database, photovoltaic panels should be calculated using the standard embodied carbon conversions below:

- Monocrystalline 242 Carbon kg CO₂ per m²
- Polycrystalline 208 Carbon kg CO₂ per m²
- Thin film 67 Carbon kg CO₂ per m²

Offsets Integrated Into Project Design

On-site activities, such as the installation of renewable energy systems, planting native landscapes, etc., may not be applied to reduce the calculated embodied carbon footprint of the project as it relates to fulfilling this Imperative. Any sections in available calculators that offer opportunities to account for such project elements should be left blank for the purpose of determining the amount of carbon offsets required.

Lifespan

All projects should use a standard 50-year lifespan when calculating embodied carbon for consistency and to ensure buildings with longer lifespans are not penalized for the carbon impacts of replacing materials over time.