

What You Can Do

Reducing embodied carbon can be practical and cost-conscious when it's considered early and planned with the full project team.

Practical steps:

- Reuse or retrofit where feasible.
- Deconstruct, reuse, and recycle materials.
- Build durable, adaptable structures.
- Use less concrete where possible.
- Make these decisions early: changes are easiest in design.

Scan the QR code on the back to see how to apply these to your projects.

Plan Early
Build Confidently



The RDN is sharing practical information to help builders and homeowners understand embodied carbon and identify cost-conscious opportunities.

Scan to learn more and access local resources.



Embodied Carbon Explained

What you need to know

- ▶ Did you know that more than half of a building's lifetime greenhouse gas emissions happen before homeowners move in?





What Is Embodied Carbon

Embodied carbon is the greenhouse gases emitted by making, transporting, installing, and disposing of building materials.

These emissions occur during:

- Raw material extraction
- Manufacturing
- Transportation
- Construction on site

Why It Matters



Planning Early Saves Costs

Nearly 50% embodied carbon reduction is possible with less than a 1% cost increase when decisions are made early.



Schedule Protection

Planning low-carbon options early reduces last-minute product swaps and helps prevent procurement-related delays.



Growing Demand

More clients and owners are asking about low-carbon approaches as part of project goals, reporting, and procurement expectations.



Less Rework

Coordinating early with the full team (Integrated Design Process) supports smoother construction and can reduce delays and rework.

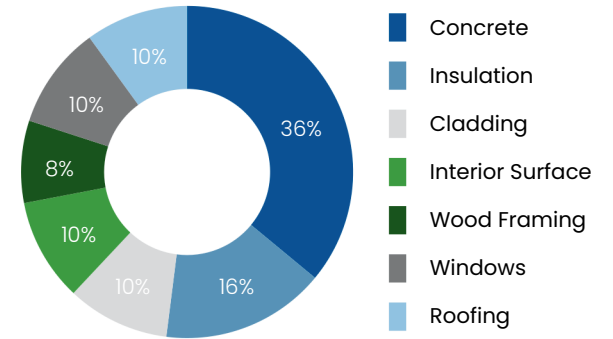


Smarter Scope

Building smaller, adding a second unit, or reusing existing structures can reduce material use while delivering the same housing value.

The biggest cost and carbon savings come from decisions made early.

Where Carbon Adds Up



Concrete typically drives the **largest** share of embodied carbon in residential buildings.

- ✓ *Use less concrete:* review foundation size and structure efficiency with your designer and engineer.
- ✓ *Use lower-carbon concrete:* ask your supplier about mix options.
- ✓ *Choose lower-impact insulation:* cellulose or mineral wool instead of high-foam options.
- ✓ *Right-size insulation:* use energy modeling to avoid unnecessary material.

