



CARBON DRAWDOWN NOW! BUILDING TO COMBAT THE CLIMATE CRISIS

Wednesday, April 22, 2020, 5:00-6:30pm

LEARNING GUIDE

Use this document as a pre- and post-learning guide for our [interactive Earth Day webinar](#), **Carbon Drawdown Now!** The pre-learning questions are designed to get you thinking about different types of carbon emissions, and introduce you to the idea of *embodied carbon*, which will be explained and discussed in detail in **Carbon Drawdown Now!** Feel free to complete these brief activities alone or in groups. Use the knowledge you already have or solicit some help from Google. Just get thinking! There's no "wrong" way to use this guide.

The post-learning questions are designed to continue the discussion about embodied carbon once the webinar is over. Questions are paired with actions you can take to support lowering embodied carbon in buildings. After the webinar (and after you've had a chance to have some creative discussions), check out the additional resources at the end of this guide.

Questions? Email kern@hampshire.edu.

Pre-Learning Discussion Questions

1. What are some ways that buildings might contribute to climate change? Think pre-construction, construction, operation, demolition...
2. A building's *operational carbon emissions* are those that result from using the building: the fuels used in heating and cooling, electricity use, water heating. Knowing this, what might a building's *embodied carbon emissions* include?
3. Think about some of the materials that went into creating your home, school, or office building (i.e. steel, concrete, brick, wood, stone, insulation, etc.). Choose at least one of these materials and brainstorm its life cycle. What was this material's raw form? How (and where) was this material extracted and manufactured before it made its way to your building? How did it get to your building's site? Is there any maintenance required to keep this material functioning properly? What will happen to this material when your building is at the end of its life? How will it be demolished, disposed of, or re-used?



4. Can you think of any ways to reduce a building's embodied carbon footprint? If this is difficult, that's okay! We'll discuss this in **Carbon Drawdown Now!**

If you're interested in learning more about embodied carbon before Earth Day, check out this brief [blog post](#) on embodied carbon in buildings. Once you've explored the pre-learning questions, it's time to [watch Carbon Drawdown Now!](#)

Post-Learning Discussion Questions

1. Let's revisit the building material(s) you brainstormed in the pre-learning discussion. How might you calculate the embodied carbon of a material, your own home, or another building project?
 - **Action: Learn how to calculate embodied carbon.**
2. What new or existing policies in your region might drive action on reducing embodied carbon in buildings?
 - **Action: Write to your local or state representative** in support of embodied carbon reduction policies.
3. How might lower-embodied carbon building materials support other efforts in your area, like promoting sustainable agriculture, supporting locally-owned businesses, or greater equity in the building fields?
 - **Action: Learn about a lower-embodied carbon product** or material that's creating unique partnerships. Present it to your class or post about it on social media (and tag us!).
4. How might you share what you learned in this webinar? How would your approach change with different audiences (i.e. a family member, co-worker, or policymaker)?
 - **Action: Spread the knowledge!** Teach a friend or co-worker about the important role that reducing embodied carbon plays in climate action.

Want more details? Following the webinar, Jacob and Ace graciously took the time to answer some of the questions we didn't have time for during the live session's Q&A. [Here are their answers](#), which include links to many additional resources.

To keep the Earth Day momentum going, [here are some more actions you can take right now](#) to help reduce embodied carbon emissions.