

Activity

Combating Climate Change: Climate Simulator Activity

Learning Objectives

Students will evaluate the costs and benefits of pursuing various climate policy options through the eyes of a policymaker.

Materials

[How Do Governments Combat Climate Change?](#)



[How Regulations Help Fight Climate Change](#)



[What Are Market-Based Solutions for Mitigating Climate Change?](#)



[Combating Climate Change Activity Slides](#)



[Climate Policy Options Worksheet](#)



[EN-ROADS Climate Solutions Simulator](#)



Instructional Plan

1. (5 min) - Begin class session with a brief introduction to climate policy.
2. (10 min) - Have students use the attached Climate Policy Options Worksheet to process their notes from the readings (readings should be assigned as homework in advance of class session).
3. (10 min) - Have students pair up with a neighbor to compare their answers and improve their initial work. As they complete the worksheets, ask students to evaluate the different policy options from their own individual perspectives, the perspective of a consumer, and the perspective of a business owner.
4. (5 min) - Guide students through a brief class discussion of the advantages and disadvantages of each policy option.
5. (5 min) - Briefly introduce students to the EN-ROADS Climate Solutions Simulator. Explain to students that they will use the remainder of class to explore the impacts of different climate policies on global temperatures. Emphasize that students may combine policy options as they see fit, but that students should keep in mind possible public reactions to their policy choices throughout the simulation.
6. (10 min) - Provide students ten minutes to explore the EN-ROADS Climate Solutions Simulator. Students should aim to limit global warming to 2°C (or less) using a combination of the different policy options discussed in class. Students should be prepared to explain the financial and political risks of each option they implement in the simulator, as well as how they would rationalize these risks to a prospective real-world public.
7. (10 min) - Use the questions provide in the slides to guide students through a class discussion on their experience with the simulator and what it reveals about the complexities of pursuing climate action through policy.

Notes:

- The EN-ROADS Climate Solutions Simulator runs only on computers and tablets with modern web browsers and is not supported on mobile phones or small devices. Instructors should ask students to attend class with a laptop or arrange for this class period to spent in an on-campus lab. Student without laptops or tablets may also partner with students who have these devices at hand when exploring the simulation.
- Students may choose to "do everything" in the simulator to reduce global warming as much as possible. Warn students who choose this route that they should be prepared to explain the financial and political risks of their choices, as well as how would rationalize these risks to a prospective real-world public. Instructors may need to circulate through the classroom to ensure that students are taking the simulator experience seriously.