

Lesson Plan

# Climate Change: Regulation and Market-Based Climate Solutions

## Length

one 45-minute period

## Grade Level

High School

## Learning Objectives

Students will understand the relative strengths and weaknesses of regulation and market-based solutions for climate change.

[How Regulations Help Fight Climate Change](#)



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



[Instructions for Writing an Op-Ed](#)



[Instructions for Writing a Letter to the Editor](#)



[Writing a Letter to a Member of Congress \(or Other Elected Official\)](#)



[Handout](#)



## Homework

- Read "How Regulations Help Fight Climate Change"
- Complete homework handout

## Class

- (5 minutes) Review homework, especially the final question about what limitations regulations face as a policy tool.
- (20 minutes) Have students read "What Are Market-Based Solutions for Mitigating Climate Change?" and fill out the graphic organizer in the class handout
- (20 minutes) Lead students through a discussion about regulation and market-based solutions
  - First brainstorm as a group what each policy tool is good for, and record responses on the board
  - Ask: is one tool better than the other? Why?
  - Ask: are there some problems that neither tool can solve? What other tools might be needed?

# Homework

Write an op-ed, letter to the editor, or letter to a local official about climate policy. What tools do you think would be most effective in your community? Why? Be sure to use your knowledge about regulation and market-based climate solutions in supporting your argument.

## Vocabulary

emissions

refers to the amount of greenhouse gases an entity, such as a country or company, produces.

Clean Air Act

a federal law that regulates airborne emissions from stationary sources (such as factories) and mobile ones (such as cars).

greenhouse gas

any gas that absorbs heat in the atmosphere and re-emits it back toward Earth, causing a warming effect.

fossil fuels

hydrocarbon energy sources such as oil, coal, or natural gas.

European Union

a supranational organization composed of twenty-eight European countries, formally established by the 1992 Maastricht Treaty. The EU's objectives include the economic, political, and security integration of its members, accomplished through such methods as removal of trade barriers; free circulation of EU citizens among certain member countries; and use of a common currency, the euro, by nineteen members.

biofuel

liquid fuel derived from plants. A prominent example is ethanol, a product of sugarcane or corn.

cap-and-trade

a policy framework in which a government caps the amount of greenhouse gases that can be emitted in the country or region during a given period. Emissions permits, which allow companies to emit a specific amount of greenhouse gases, are issued or sold to companies, up to the national or regional cap. These permits can be traded among companies—sold by companies that emit less than their targets and bought by those that emit more—creating a financial incentive to lower emissions and providing flexibility for companies that cannot or do not wish to do so.

carbon tax

a policy in which entities such as companies pay the government a fixed fee for each ton of greenhouse gases emitted. The purpose is to encourage firms to pursue technologies and practices that will reduce their emissions.

renewable energy

energy derived from sources such as sunlight, wind, and water, which have a steadily replenishing supply.