

Lesson Plan

# **Climate Change: Policy**

# Length

One 45-minute period. Second 45-minute period optional. **Grade Level** High School

# Learning Objectives

- Students will be able to articulate the debate over who should be responsible for combating climate change
- Students will be able to identify how the Paris Agreement addresses this question, and the benefits and drawbacks of that approach
- Students will be able to identify some of the ways in which countries are combating climate change

Who Releases the Most Greenhouse Gases?

Who Is Responsible for Climate Change?

The Paris Agreement

How Do Governments Combat Climate Change?

**Climate Change Adaptations** 

Guided Reading Handout

Presentation

# Homework

- 1. Read: Who Releases the Most Greenhouse Gases?
- 2. Watch: Who Is Responsible for Climate Change?
- 3. Read: The Paris Agreement
- 4. Complete Climate Change Collection: Policy | Guided Reading Handout

# **Class** One

- 1. (5 minutes) Watch: What Is Climate Change?
- 2. (5 minutes) View/Discuss: Greenhouse Gas Emissions slides.
  - Ask: what is the difference between annual and cumulative emissions?
    - Ask: why is it important to count emissions both ways?
- 3. (10 minutes) View/Discuss: Who Is Responsible for Climate Change?

- Ask (from the guided reading handout): Summarize the argument made by Narendra Modi and other leaders of developing countries about who bears responsibility for climate change in your own words.
- Ask (from the guided reading handout): Summarize the opposing argument made by some developed countries about how to address climate change. What tradeoff do they call for?
- Ask (from the guided reading handout): How does the history of resource exploitation between developed and developing countries shape this debate?
- 4. (5 minutes) Review: Guided Reading Handout
  - (#11) What is a Nationally Determined Contribution (NDC)?
  - (#14) Use the infographic (of a thermometer) to fill in the chart below
  - (#15) What are some shortcomings of current Nationally Determined Contributions (NDCs)?
- (10 minutes) Think-Pair-Share: "Why do you think negotiators chose the approach of using NDCs, rather than negotiating each country's responsibility as they did in the Kyoto Protocol?" <u>Examine the</u> <u>Comparing NDCs slide</u>
- 6. **(10 minutes) Discuss:** Is the Paris Agreement the best way to combat climate change? If not, what should countries do instead?

# Class Two (Optional)

- 1. (5 minutes) Present: Climate Change: Policy | Presentation
- 2. (15 minutes) Read
  - Half the class reads How Do Governments Combat Climate Change?
  - The other half of the class reads Climate Change Adaptations
- 3. (15 minutes) Discuss in small groups composed of students who did both readings
  - Which strategies for combating climate change are available to any country? Which strategies might be too expensive for some countries to pursue?
  - Which countries are most affected by climate change? Which countries are best positioned to adapt?
- 4. **(10 minutes) Think-Pair-Share:** "Taking into account what you have learned today, do you think the Paris Agreement is the best way to combat climate change? Has your opinion changed since yesterday? If so, how?" Examine the Comparing NDCs slide

# Vocabulary

# Industrial Revolution

a transition, beginning in the eighteenth century, from small-scale, largely agricultural economies to more industry-intensive ones.

### emissions

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

# greenhouse gases

gases that absorb heat in the atmosphere and re-emit it back toward earth, causing a warming effect.

# industrialization

the process by which the balance of production shifts from agriculture toward manufacturing and industry.

### deforestation

the clearing or thinning of forests by people for materials, land-use, medicinal ingredients, farming, paper production, or other non-forest purposes.

### fossil fuels

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

#### Paris Agreement

a nearly universal international agreement reached in 2015 that requires signatories to offer concrete emissions reductions pledges, establishes rules to monitor their performance against those pledges, and sets up a process to review and increase the ambition of the pledges over time. The Paris Agreement's goal is to limit global warming by 2 degrees Celsius (about 3.6 degrees Fahrenheit) above pre-industrial temperatures.

#### Kyoto Protocol

a 1997 agreement reached in Kyoto, Japan, that amended the United Nations Framework Convention on Climate Change.

#### nationally determined contributions

plans submitted by countries party to the Paris Agreement that outline their proposed emissions reductions and adaptation strategies. NDCs can vary widely in their length, specific proposals, and format.

#### gross domestic product

a measure of a country's economic output determined by the value of goods and services it produces in a given year.

### renewable energy

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

### adaptation

term for the actions and strategies that aim to reduce the exposure of people and places to climate change's effects.

#### mitigation

efforts to reduce or prevent emissions of greenhouse gases.