

# Climate Change Challenge

## A Lesson Plan from Greening Forward

### Focus Question

What is each person's responsibility for environmental stewardship?

### Purpose

Students view a 14-minute online video about greenhouse gas emissions. The engaging video illustrates how state governments take the lead on setting policies. Students discuss the issue and motivations for giving for the common good.

Through discussion and brainstorming, students establish things they can do personally and as a team to reduce greenhouse gas emissions.

### Duration

One 50 Minute Class Period

### Objectives

- Watch a video about greenhouse gas and state policies.
- Discuss several facts and issues related to the video.
- Discuss civic engagement and motivations for giving for the common good.
- Research their own state's policies about greenhouse gas emissions.
- Plan and carry out an Earth Day Event related to improving air quality.

### Materials

- Internet access and ability to project online

video "Ahead of the Curve" for the whole class to see

- Internet access for groups of students to work with an interactive map (information may be shared by printing out state information in advance)

### Instructional Procedures

Teacher Note: Prior to the start of this class make sure you can access the 14-minute streaming video "Ahead of the Curve" about states adopting climate change policies as a model for the national government.

#### *Anticipatory Set*

Tell the students that they are going to watch a video about people giving their time to reduce global climate change. Tell them to listen for solutions proposed by the different states. Have them listen for details about consensus-building and leading locally as a laboratory for the federal government.

Have them note who is giving time without pay to work for this cause and why it is important to them.

Show the video Ahead of the Curve.

After the video, have a conversation about some of the following topics: What is greenhouse gas? Whose responsibility is it to do something about greenhouse gas and why?

Statistics from video: Thirty of the world's seventy-five biggest greenhouse gas emitters are US states. The US has 5% of the world population but creates 20% of the greenhouse gas.) On what sources of greenhouse gas did the different states focus? (transportation, home efficiency) Do you think working locally makes a difference on a global issue like climate change?

Several people gave their time and talent for the sake of reducing greenhouse gas emissions for the common good. Discuss the motivations for giving of these educators, politicians, and business people serving on the committees. Ask the students why they think people get involved in a committee that works to improve air quality if they aren't getting paid. What is civic engagement? What is a consensus model of decision-making? Several people mentioned economic advantages to setting greenhouse gas policy. How could making these policies save or generate money? Were the governors motivated only by saving money? What role does the common good play in this issue?

With the class, go to the website for the Center for Climate Strategies to read about your state's policy plans regarding climate change. Click on other states to see the variety of policies and time lines in place. (This can be done as a whole class or you can assign different states to groups to research and report.)

Challenge the students to think of things they can do personally to reduce greenhouse gas emissions (walking to school instead of driving, turning down the thermostat in the winter and wearing a sweatshirt, opening a window in the summer instead of using the air conditioner, etc.). Have each student take notes of the discussion. Give them homework to write a personal statement telling what they can do to improve air

quality for the common good.

Discuss project ideas the class can do together for the Earth Day Event to reduce greenhouse gas emissions or improve the air quality in their community. This may include letter-writing and advocacy to the state or federal government about establishing energy-efficiency or clean-air policies.

### Assessment

The assessment for this lesson is based on involvement in the group discussions and completion of the written personal statement.

### School/Home Connection

Have students look at their home efficiency with their families. They can look for ways to reduce energy consumption in their heating, cooling, cooking, and transportation habits. Also, encourage students to look for ways to reduce the amount of trash they produce by recycling and reusing materials.

### Common Core Standard Suggestions

CCSS.ELA-LITERACY.RST.9-10.2  
CCSS.ELA-LITERACY.RH.9-10.6  
CCSS.ELA-LITERACY.RH.9-10.9  
CCSS.ELA-LITERACY.RH.11-12.6  
CCSS.ELA-LITERACY.RST.11-12.7  
CCSS.ELA-LITERACY.RST.11-12.9

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