## **Renewable Energy**

## Videos:

"How wind and solar are leading the future of clean energy" https://www.youtube.com/watch?v=8S5I4pmmnG4	(3:17 minutes)
"Why Wind and Solar Make Our Power Grid Less Reliable" https://www.youtube.com/watch?v=-3CWH0FfS8M	(5:19 minutes)

## Guide:

The questions below will help students achieve a better understanding of the arguments made on either side of a contentious topic. Because these questions often touch upon statements made briefly in the videos, we recommend reading the questions before watching each video.

Students are encouraged to take notes during the videos, and it may be helpful for students to break into groups, each taking responsibility for only a few questions, before coming together for discussion.

## Analysis Questions:

- 1. What are the opposing ideas in these two videos?
- 2. The NBC News video included a clip of Jimmy Carter saying: "A generation from now, this solar heater can either be a curiosity, a museum piece, an example of a road not taken, or it can be just a small part of one of the greatest and most exciting adventures." What did he mean by this? How does this relate to the current state of renewable energy?
- 3. According to the Stossel video, "the cost of electricity in California has increased three times faster than the rest of the U.S." Is it worth paying more for renewable energy? Why/Why not?
- 4. The NBC News video showed that the price of solar energy has fallen drastically over the past few decades. Does this make you hopeful that solar energy could become America's primary energy source? Why/Why not?
- 5. John Stossel showed that California has suffered blackouts since switching to renewable energy. Should reliability issues deter us from switching to renewable energy? Why/Why not?
- 6. In the NBC News video, Ellison Barber said: "The future of clean energy is full of revolutionary ideas that go far beyond turbines and panels." What did she mean by this?
- 7. The Stossel video explained that California has a program that pays people to generate solar power. According to the video, who benefits most from this program? Who doesn't benefit?

- 8. Ellison Barber said: "Over the next five years, global investment in renewable energy is set to skyrocket from \$330 billion today to almost half a trillion dollars by 2028." Is it a good idea to invest so much money in renewable energy? Why/Why not?
- 9. The Stossel video showed that there's an environmental cost to wind turbines, because of the transportation and non-renewable materials required. Were you aware of these environmental costs? Does it affect your opinion of wind turbines? If so, how?
- 10. Ellison Barber said: "A green rush, once a distant idea, now fueling hope for a greener tomorrow." What did she mean by this? What is "a green rush"?
- 11. The Stossel video showed that the government subsidizes solar panels, including in areas where it isn't very efficient. Should the government be subsidizing renewable energy? Why/Why not?
- 12. Do you have any first-hand experience with renewable energy?
- 13. We learned about wind and solar, but what are other forms of renewable energy?
- 14. Does clean energy have to be renewable, or are there other alternatives to fossil fuels?
- 15. Did these two videos share any common ground? Were there any points on which they agreed? If so, what were they?
- 16. Should one of the arguments we heard carry more weight than the other? If so, which one? Why?
- 17. Did you have an opinion on this topic before watching these videos? If so, what was it? Has your opinion changed? If so, how? What did you learn from these videos that affects your views on this topic?
- 18. What else would you like to learn about this topic?
- 19. For more, see these related Both Sides of the Issue pairings:
  - a. Both Sides of the Issue: Fossil Fuels For and Against
  - b. Both Sides of the Issue: Is Nuclear Power the Answer?
  - c. Both Sides of the Issue: Electric Cars
  - d. Both Sides of the Issue: Electric Cars Revisited