
Electric Cars

Videos:

“Are Electric Cars Really More Environmentally Friendly?”
https://www.youtube.com/watch?v=0_RRKePSjL4 (4:20 minutes)

“Electric Cars: Inconvenient Facts, Part 1”
<https://www.youtube.com/watch?v=i6c22H4Ki8U> (4:44 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. Hank Green said: “Telling people that buying an electric car is a great way to fight climate change is a pretty reliable way to start an argument in some circles.” Have you found this to be true? Have you found electric cars to be controversial?
3. John Stossel used the term “magical thinking.” What does that term mean?
4. Hank Green said that electric cars don’t consume “anywhere near the fossil fuels that gas-powered cars do” over their lifespans. Why is it important to make this comparison over the cars’ lifespans?
5. In the Stossel video, Mark Mills said that if the world reached aspirations of 500 million electric vehicles, it would reduce world oil consumption by around 10%. Does this statement impact your view of the impact of electric vehicles? If so, how?
6. Hank Green said that electricity is getting “cleaner all the time.” Does this make you more optimistic about the future of electric cars? Why/Why not?
7. Mark Mills said: “The mining equipment to get the copper to build the electric cars is all oil-fired.” Is it important to acknowledge that the manufacturing of electric cars requires fossil fuels? Why/Why not?
8. Hank Green said: “[W]here you live determines how clean your electricity is.” Had you thought about this before watching this video? Do you know where your electricity comes from?

9. John Stossel said that only 12% of electricity in the United States comes from wind and solar. Were you aware of that before watching this video? Does it change how you view electricity in the United States? Why/Why not?
10. Hank Green said that even in the states with the “dirtiest” electricity, electric cars outperform gas-powered cars. Is that fact enough to validate that electric cars are a better choice? Why/Why not?
11. John Stossel said that U.S. regulations make mining for the minerals needed to build batteries “impossible,” so instead it’s done in other countries, causing pollution for local communities and sometimes using slave and child labor. Stossel said: “Most Americans proudly driving electric cars don’t know about this. They just don’t want mining done near them.” How does this make you feel? Can you think of other examples in which Americans turn a blind eye to immoral practices that benefit them?
12. Hank Green said that “power plants are just better at making power than car engines are.” What did he mean by this?
13. Mark Mills said: “[T]he electric vehicle has emitted 10 to 20 tons of carbon dioxide before it even gets to your driveway, before you drive the first mile and plug it in the first time.” Were you aware of this? Does it change your view of electric cars? Why/Why not?
14. Hank Green said: “[C]limate change isn’t just one problem...” What did he mean by this?
15. Mark Mills said that you have to own an electric car for at least 100,000 miles to achieve the carbon emission benefits of electric cars over gas-powered cars. Does that make electric cars a better option than gas-powered cars? Why/Why not?
16. Did these two videos share any common ground? Were there any points on which they agreed? If so, what were they?
17. Should one of the arguments we heard carry more weight than the other? If so, which one? Why?
18. 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?
19. What else would you like to learn about this topic?