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Edited Feb 20, 2021 5:08 AM by [admin...](#)

e2: Paving the way

http://physics.hpa.edu/physics/apenvsci/videos/e2_videos/e2%20energy/3%20paving%20the%20way.mp4

APES questions—e2 Energy 3: Paving the way

1. How many gallons of gas does each American use each day?
2. Why is it encouraging that the VP of research and development (R&D) at GM says what he does?
3. Look up Amory Lovins, what does he think represents the best solution?
4. Hydrogen is not really a fuel, but an energy transport technology. why?
5. What kind of car was Henry Ford's car for his wife?
6. How many mpg did the Model T get, compared to today?
7. How efficient is the fuel in a car? why?
8. Vijay says the solution involves what?
9. FiberForge is in Colorado, not the normal industrial centers, why is this important?
10. Why is "stamping" familiar for car makers?
11. What is Amory's reference to "The Graduate"? how is this relevant to you? (look up "one word-plastics" on youtube)
12. What are the most expensive parts of a car plant?
13. What is the role of public policy in this solution?
14. Why is the Chevy Volt different from the Prius and the Tesla?
15. Why is the Prius mileage better in the city than the freeway, the opposite of normal cars?
16. Your fossil fuel car has a mileage rating in miles per gallon (mpg). How would you rate the mileage of an EV (electric vehicle)?
17. Why is the battery technology Elon Musk is developing such a game changer?
18. Why is the hydrogen fuel cell better than most battery solutions?
19. Imagine you are having a conversation with your parents about getting a more efficient car. what would you tell them?
20. If you were planning on getting an electric vehicle (EV or plug-in hybrid), what changes would you make at your home?
21. Since this video came out (2007), GM and other car makers were near bankruptcy, and were rescued by the US government. What was the tradeoff for this rescue?

22. Summarize Vijay's argument at the end of the video. how would you make this happen?