

Plug-in Hybrid Vehicles

PowerPoint Presentation

This PowerPoint presentation consists of all data which has been gathered on Alternative Fuel Vehicles, but concentrates on PHEVs. You are required to include relevant photos and text objects with data compiled from internet searches on each slide. You may decide your own backgrounds, text, and transitions. Selective Internet links, BiFuel Auto photos, and the Prius Demo Photos are in the Shared Folder (under Macintosh HD/Users/Shared). Drag these folders to your personal folder.

Slide Titles

1. Introduction

1. Title on this slide and all to follow
2. Description of PHEVs (approx. two sentences)
3. Your name
4. Date
5. CalCars Prius PHEV photo (from EVWorld site)

2. Need for Alternative Fuel Vehicles

1. Explain why AFVs are necessary in our country and world. Include at least four reasons, including pollution, petroleum, international relations, economics, and resources.
2. Include a photo of an AFV of any type

3. Types of Alternative Fuel Vehicles

1. List at least 5 different types of AFVs (examples: Diesel, HEV, etc.)
2. Include one positive attribute for each AFV
3. Include a small photo of another AFV of any type

4. Plug-in Hybrid Vehicles

1. Why are PHEVs better than regular HEVs?
2. How much more does the Prius cost as a PHEV?
3. How far can you drive in pure electric mode in the EDrive PHEV?
4. What company is creating PHEVs for the public (& what city)?
5. What type of batteries are used in this PHEV? Include a photo of the battery pack of the EDrive Prius PHEV.

5. Diesel Vehicles

1. Add a photo of a vehicle which runs on diesel (regular diesel, or biodiesel, or diesel/electric hybrid)
2. List positives about diesel fuel
3. List negatives about diesel fuel
4. How is diesel fuel produced

- 6. Pure Electric Vehicles**
 1. Add a photo of a pure electric vehicle
 2. List a minimum of two positives about electric vehicles
 3. List a minimum of two negatives about electric vehicles
 4. List five ways electricity is produced in the US

- 7. Compressed Natural Gas Vehicles**
 1. Add a photo of a Honda Civic GX
 2. List 2+ positives about CNG
 3. List 2+ negatives about CNG
 4. How is CNG produced

- 8. Ethanol Fuel Vehicles**
 1. Add a photo of a vehicle which can run on an ethanol blend of fuel
 2. List 2+ positives of ethanol as a fuel
 3. List 2+ negatives of ethanol as a fuel
 4. List 2+ products from which ethanol can be produced

- 9. Liquid Petroleum Gas (Propane or LPG) Vehicles**
 1. Add a photo of a vehicle which can use LPG
 2. List 2+ positives of LPG
 3. List 2+ negatives of LPG
 4. How is LPG produced

- 10. Hydrogen Fuel Cell Vehicles**
 1. Add a photo of a vehicle which uses a hydrogen fuel cell
 2. List 2+ positives of hydrogen fuel cells
 3. List 2+ negatives of hydrogen fuel cells
 4. How can hydrogen be produced for fuel cells

- 11. The Case for PHEVs--Part 1**
 1. Add a photo of your favorite HEV (which can possibly be converted to PHEV)
 2. EVWorld site: How much would electricity cost in a PHEV traveling 60 miles
 3. How much would gasoline cost (at \$2.40 per gallon & 20 miles per gallon)

- 12. The Case for PHEVs--Part II**
 1. Add the same photo from the previous slide
 2. Explain how speed and aerodynamics affect miles per gallon in a vehicle
 3. What percent of power at 55mph is from electricity in a PHEV
 4. What percent of power at 75mph is from electricity in a PHEV
 5. From what sources does electric power need to be produced to be very clean

- 13. U.C.Davis Institute for Transportation Studies**
 1. Include two photos of the Toyota Prius demonstrated by UCD
 2. Add the demonstrator's name (Emily Winston)
 3. Include her title (Fuel Cell Vehicle division)
 4. Add text describing the ride-along (EV mode, mpg earned, car pool lane, etc.)

- 14. Why I Would Buy a PHEV**
 1. Include a photo of the car you want to eventually be available as a PHEV
 2. Tell why you would purchase a PHEV, giving several reasons
 3. Write a final recommendation which will encourage other drivers to agree with you about PHEVs.