

**Environmental Protection Agency**  
**Fuel Economy Label – Phase 2 Focus Group Moderator Guide**

**Introduction (8 minutes)**

- Moderator introduces herself/himself.
- [Explain:] A focus group is a group discussion where we can learn more in-depth about peoples' ideas and opinions (compared to telephone or written surveys).
- My job is to facilitate the discussion and make sure that everyone has an opportunity to speak **and to make sure that no one dominates the conversation.**
- Mention observers in separate room. Our discussion today is being recorded. These recordings allow us to write a more complete report, and to make sure we accurately reflect your opinions.
- Housekeeping – Toilets and refreshments.
- Mention ground rules:
  - o There is no right or wrong answer; we're interested in your honest and candid opinions and ideas.
  - o Our discussion is totally confidential. We will not use your name or contact information in any report.
  - o Please only speak one at a time, so that the recorder can pick up all your comments.
  - o It is important to tell YOUR thoughts, not what you think others will think, or what you think others want to hear.
  - o Please turn off cell phones
  - o Your stipend will be provided as you leave.
  - o Relax and enjoy

Thank you all for participating in the survey we sent to you in advance. Today we will continue the discussion talking about new car purchases. Any questions before we begin?

- Let's start off by getting to know a little more about each other. I'd like us to go around the room with each person answering the following questions:
  - Your first name
  - When did you buy your last new vehicle?
  - What make and model did you buy?
  - Did you consider buying a hybrid, or clean diesel, or some other alternative fuel vehicle?

### Current Label Use (12 minutes)

1. What were the top two things that influenced your vehicle choice? Could I see a show of hands of those who considered fuel efficiency in the decision of which vehicle you chose to buy?

Are there other things that you haven't mentioned that would stop you from buying this vehicle that in all other ways meets your needs? (Listen for and probe on things like performance, attractiveness, 'cool factor', impact on the environment, etc.)

2. Did you have a specific vehicle in mind when you started shopping for a vehicle? Is that the vehicle you ended up purchasing? Why or why not? If not, probe to determine if fuel efficiency influenced the change.
3. Did you use the fuel economy label when deciding on your new vehicle purchase? Why or why not? How did you use it? When in the vehicle choice process did you use it? Then show participants a large size example of the current label (as well as 8 x11 copy for each participant) and ask what information on the label most influenced their purchasing decision.
4. In regard to the fuel economy label information, do you find the information accurate, in particular to your driving patterns, cost information? Why or why not?
5. What are some of the hybrid vehicles that are on the market today? If you look at these vehicles on a new car lot you will see that hybrid vehicles use the same fuel economy label as a conventional gasoline engine vehicle. (Show large size version of a Prius fuel economy label and hand out 8 X 11 copy for each participant.) Why is that? (Listen for their understanding of how hybrids work and then explain that:

*Hybrid Vehicles use a gasoline engine as well as an electric motor to propel the vehicle. However, power for the electric motor comes from a battery that is charged by the gasoline engine and by "recovering" the energy from the decelerating and braking action of the vehicle. Therefore the only fuel a hybrid vehicle uses is gasoline, either to propel the vehicle or to charge the battery. [Put this statement on a poster chart sheet so that we can refer to it when discussing other types of vehicles below that "work like a hybrid."])*

### Electric Vehicles (25 minutes)

Now we're going to talk about Electric Vehicles.

6. Are you aware of any totally electric vehicles that are on the market or that will be coming on the market? (Listen for Nissan Leaf.)

Read the following (and put on poster chart sheet):

*Electric Vehicles use electricity stored in batteries to propel the vehicle. You charge the battery by plugging your vehicle into an electrical outlet. This could be a standard electric outlet or a high voltage custom-installed charging station for more rapid*

*charging. Like hybrid vehicles, energy recovered from braking and decelerations can be used to charge the battery. The vehicle travels until the charge is depleted or you re-charge it. You do not have the option to run it on gasoline.*

7. If you were looking at an Electric Vehicle while shopping on a car dealer lot, what information do you want to see on the Fuel Economy Label? (Capture list on poster chart) Now let's put those in priority order. (Rank the list) (Listen for and probe for items such as range, fuel efficiency, fuel cost, and environmental impact.)
8. (Pass out a blank label template) For the next couple minutes I'd like you to look at the list of elements on the poster chart that we discussed and using only those that are important to **you** sketch or write down how you might design the label (Have the participants individually work on this for 3 minutes. If they are struggling with this move to the group discussion exercise.

Then open up to discussion and have the group work together to design a label for Electric Vehicles using the elements they each identified, as well as the elements on the "puzzle pieces" sheet (the metrics prepared by EPA for electric vehicles). Utilize a large board that is a blank label with pre-created elements (the puzzle pieces) that can be stuck on the board – blank pieces will also be created for additional elements that the group identifies. [May want to probe on use of City and Highway for some of the metrics, e.g., consumption, MPGe, range. There is likely to be a difference in these values across the two conditions.]

- a. kwhr/100 miles (or another consumption measure)
- b. miles per gallon equivalent - MPGe
  - If not mentioned, ask about a vehicle that gets 300 MPGe. Probe on:
    - o What does MPGe mean to you?
    - o Do you think this is useful considering an electric vehicle does not consume gallons? Why or Why not?
    - o Should MPGe be on the label? Why or why not?
- c. Fuel cost (Probe on annual, per month, weekly, cents per mile, cents per 100 miles.)
- d. Range
- e. Charging time
- f. Info on how to charge
- g. Environmental impact

Have a parking lot of other elements that must be on the label. Bring these out as needed if not mentioned by participants. Ask how important these are and where they should go on the label.

9. Once label elements have been added, probe on the following:
  - Does this give them the information they need?
  - Do they need all of this info?
  - Do they need additional info?

Ask client if they have any additional questions regarding Electric Vehicle discussion.

### Extended Range Electric Vehicle (30 minutes)

Now we're going to talk about another type of vehicle that some refer to as an Extended Range Electric Vehicle.

10. Are you aware of any Extended Range Electric Vehicles that are on the market or that will be coming on the market? (Listen for Chevy Volt.)

(Read the following and put on poster chart sheet and leave the conventional vehicle label and just designed EV label showing for reference.):

- Extended Range Electric Vehicles *have two modes of operation—1) when battery is charged and 2) when it isn't:*
  - o *Once charged, the car uses all the electricity, when the electricity is depleted it turns on the gasoline engine*
  - o *When it's discharged, it works like a hybrid—battery gets recharged when driving and braking. Therefore, when discharged it uses gasoline, either to propel the vehicle or to charge the battery.*
- *Important: daily driving distance can GREATLY affect amount of gasoline used. Can go all the way from zero gasoline (if shorter commutes and plenty of recharging) to entirely gasoline (if longer drives and no recharging)*

11. What should we call the two modes? (Write the following on poster chart and add others that they suggest – then get a show of hands vote and probe on why.)

- Full Battery and Empty Battery
- Electricity and Gasoline
- All Electric and Gasoline
- Charged and Discharged
- Other?

12. If you were looking at an Extended Range Electric Vehicle while shopping on a car dealer lot, what information would you want to include on the Fuel Economy Label? (Capture list on poster chart) Now let's put those in priority order. (Rank the list) (Listen for and probe for items such as range, fuel efficiency, fuel cost, and environmental impact.)

13. Is it important to you to understand that some of these things will be different depending on the mode of operation? Why or why not? (Use 'Mode Teaching Tool' as a handout to get them to see the impact of different mode configurations.)

14. (Pass out a blank label template) For the next couple minutes I'd like you to look at the list of elements on the poster chart that we discussed and using only those that are important to **you** sketch or write down how you might design the label (Have the participants individually work on this for 3 minutes. If they are struggling with this move to the group exercise.)

Then open up to discussion and have the group work together to design a label for Extended Range Electric Vehicle using the elements they each identified as well as the elements on the “puzzle pieces” (the metrics prepared by EPA for EREVs), . Utilize a large board that is a blank label with pre-created elements as listed below, that can be stuck on the board – blank pieces will also be created for additional elements that the group identifies.

- a. Range
- b. Fuel efficiency
- c. Fuel cost
- d. Environmental impact.

Have a parking lot of other elements that must be on the label. Bring these out as needed if not mentioned by participants. Ask how important these are and where they should go on the label.

15. Once label elements have been added, probe on the following:

- Does this give them the information they need?
- Do they need all of this info?
- Do they need additional info?
- Do they need City and Highway, even if values are close? (Recognize impact of wanting City and Highway on quantity of information.)

Ask client if they have any additional questions about Extended Range Electric Vehicles.

### **PHEV Vehicles (25 minutes)**

Now we’re going to talk about a label for what is known as a Plug In Hybrid Electric Vehicle, also referred to as PHEVs.

16. Are you aware of any Plug In Hybrid Electric Vehicles that are on the market or that will be coming on the market? (Listen for Prius PHEH.)

(Read and put on poster chart sheet.)

*Works like an Extended Range Electric Vehicle, except that:*

- *Has two modes of operation—when battery is charged and when it isn’t*
  - o *When it’s charged, the car uses up the charge along with the gasoline—may use both at once, may or may not have periods of using just electricity*
  - o *When it’s discharged, works like a hybrid—battery gets recharged when driving and braking. Therefore, when discharged it uses gasoline, either to propel the vehicle or to charge the battery.*
- *Important: daily driving distance can GREATLY affect amount of gasoline used.*

17. What should we call the two modes of operation in a PHEV? (Write the following on poster chart and add others that they suggest – then get a show of hands vote and probe on why.)

- Full Battery and Empty Battery
- Electricity and Gasoline

- Mostly Electric (with some gasoline) and Gasoline
  - Charged and Discharged
18. If you were looking at a Plug-In Hybrid Electric Vehicle while shopping on a car dealer lot, what information do you want to include on the Fuel Economy Label? (Capture list on poster chart) Now let's put those in priority order. (Rank the list) (Listen for and probe for items such as range, fuel efficiency, fuel cost, and environmental impact.)
19. (Pass out a blank label template) For the next couple minutes I'd like you to look at the list of elements on the poster chart that we discussed and using only those that are important to **you** sketch or write down how you might design the label (Have the participants individually work on this for 3 minutes. If they are struggling with this move to the group exercise.)

Then open up to discussion and have the group work together to design a label for Blended Plug in Hybrid Electric Vehicle using the elements they each identified as well as the elements on the "puzzle pieces" (the metrics prepared by EPA for PHEVs),, Utilize a large board that is a blank label with pre-created elements as listed below, that can be stuck on the board – blank pieces will also be created for additional elements that the group identifies.)

- a. Range
- b. Fuel efficiency
- c. Fuel cost
- d. Environmental impact

Have a parking lot of other elements that must be on the label. Bring these out as needed if not mentioned by participants. Ask how important these are and where they should go on the label.

20. Once label elements have been added, probe on the following:
- Does this give them the information they need?
  - Do they need all of this info?
  - Do they need additional info?

*(Note: this section is particularly tricky and where we most need to get input—the balance between providing enough info so that people can make the right choice for their driving needs and making it understandable is our greatest challenge. It will be important to make sure they know, if they tend toward simple, what they are giving up—and probe on whether that matters to them or not. Refer to their list of potential elements as a discussion guide in probing this area)*

Ask client if they have any additional questions about PHEVs.

### Comparison Across Vehicle Types (15 minutes)

21. Is it important to be able to compare across these different types of vehicles, meaning conventional, electric, extended range electric, plug-in hybrid electric vehicles? Why or why not? Or is it more important to have a label that explains in more detail how a particular type of vehicle works?

22. Thinking about the labels we have created for Electric Vehicles, Extended Range Electric Vehicles, Plug-In Hybrid Vehicles, as well as the current label for conventional gasoline vehicles, is there a particular element of the labels that would allow you to compare these different types of vehicles as part of your decision process? What would that be? (Probe on fuel cost and fuel consumption.)
23. Would it help to merge some of this information for vehicles that have two modes of operation? Or is it better to keep these separate? Why or why not? Probe on:
- a. Total energy consumption:
    - Is it useful as a comparison across vehicles?
    - Is MPGe helpful/meaningful when merging two fuels? Or is better to have MPG for gasoline use and Kwhr for electricity use?
    - Driving distance has huge impact on the number each driver will actually get—does that matter in your vehicle choice or in understanding the label?
    - Show the table label example with merged info – is this helpful? Why or why not?
    - Do the “bookends” of all-electric and all-gasoline numbers give enough info? Why or why not? Or do you want us to make some assumptions about what percentage of time you will drive in each mode of operation?
  - b. Total cost:
    - Is it useful as a comparison across vehicles—is that useful?
    - Do you understand what it means? Do you want to see the cost for electricity and gasoline separately?
    - Driving distance has huge impact on the cost each driver will actually get—does that matter in your vehicle choice or in understanding the label? How can this information be clearly presented in the label?
    - Do the “bookends” of all-electric and all-gasoline numbers give enough info? Why or why not? or do you want us to make some assumptions about what percentage of time you will drive in each mode of operation?
    - Prices vary over time and by region (especially true of electricity costs) – would a total cost calculated using national average prices for the previous calendar year be useful? Or would a number tailored to your region be more useful? If you could go to a website to tailor the cost estimates to your region, would you do so?”
24. Picture yourself standing on a dealer’s lot (or sitting at your computer, or whatever). What else do you think could help you better understand and compare these vehicles to each other?

25. Should the current label for gasoline vehicles be revised to make it easier to compare with the labels for these other kinds of vehicles? Why or why not?

**Wrap-Up (5 minutes)**

26. Summarize findings from focus group and ask for confirmation of summarized findings.
27. Is there information that we have not discussed today that would influence you to choose a fuel efficient vehicle?
28. Anything else you would like our clients to know about your thoughts about fuel economy labels?