## North American PHE V Demonstration

## Fleet Summary Report - Hymotion Prius (V2G reen data logger)

 Number of vehicles: 63Reporting Period: Mar - Dec 2008

## Vehicle Technologies Program

Date range of data received: $4 / 18 / 2008$ to $12 / 31 / 2008$
Number of days the vehicles were driven: 251
All Tips Canbined

| Overall gasoline fuel economy (mpg) | 51 |
| :--- | :---: |
| Total number of trips | 15726 |
| Total distance traveled (mi) | 143695 |
|  |  |
| TipsinChargeDepleting(CD) mode* | 66 |
| Gasoline fuel economy (mpg) | 8674 |
| Number of trips | $87.60 \% /$ |
| Percent of trips city / highway | $38.40 \%$ |
| Distance traveled (mi) | $26.58 \%$ |
| Percent of total distance traveled |  |


| TipsincombinedChergeDapletingandChargeSustaining(D/ CS)nodes** |  |
| :--- | :---: |
| Gasoline fuel economy (mpg) | 53 |
| Number of trips | 1696 |
| Percent of trips city / highway | $51.20 \% / 48.80 \%$ |
| Distance traveled (mi) | 42041 |
| Percent of total distance traveled | $29.26 \%$ |

## Tips indrergeSustaining(CS) mode***

| Gasoline fuel economy (mpg) | 44 |
| :--- | :---: |
| Number of trips | 5356 |
| Percent of trips city / highway | $72.90 \% / 27.10 \%$ |
| Distance traveled (mi) | 63469 |
| Percent of total distance traveled | $44.17 \%$ |


| Number of trips when the plug-in battery pack <br> was turned off by the vehicle operator^ | 351 |
| :--- | ---: |
| Distance traveled with plug-in battery pack <br> turned off $(\mathrm{mi})^{\wedge \wedge}$ | 7746 |

## Gasoline Fuel Economy By Trip Type



## Distance Traveled By Trip Type



Miles Logged by Month This Year


[^0]| TipsinChargeDapleting(CD) mode | Cty | Higheay |
| :--- | ---: | ---: | ---: |
| Gasoline fuel economy (mpg) | 64 | 69 |
| Percent of miles in electric-only mode | $31.00 \%$ | $8.00 \%$ |
| Average trip aggressiveness (on scale 0-10) | 1.5 | 1.7 |
| Average trip distance (mi) | 2.7 | 16.3 |
| TipsinconbinedChergeDepletingandChergeSustaining(CD/ CS) modes |  |  |
| Gasoline fuel economy (mpg) | 56 | 53 |
| Percent of miles in electric-only mode | $23.00 \%$ | $4.00 \%$ |
| Average trip aggressiveness (on scale 0 - 10) | 1.8 | 1.5 |
| Average trip distance (mi) | 8.1 | 42.4 |
| TipsinChergeSustaining(CS) mode |  |  |
| Gasoline fuel economy (mpg) | 38 | 46 |
| Percent of miles in electric-only mode | $21.00 \%$ | $4.00 \%$ |
| Average trip aggressiveness (on scale 0 - 10) | 1.7 | 1.7 |
| Average trip distance (mi) | 3.7 | 33.8 |

Effect Of Driving Aggressiveness on Fuel Economy This Year


Aggressiveness factor is based on accelerator pedal position. The more time spent during a trip at higher accelerator pedal position, the higher the trip agressiveness.

Trip Fuel Economy Distribution By Trip Type


| Average number of charging events per vehicle per month when driven | 16 |
| :--- | :---: |
| Average number of charging events per vehicle per day when vehicle driven | 0.6 |
| Average distance between charging events | 36.1 |
| Average number of trips between charging events | 4.0 |
| Average duration of charging event (hr) * | 17.5 |
| Average energy per charging event (AC kWh) | 2.5 |
| Average charging energy per vehicle per month (AC kWh) | 41.9 |
| Total number of charging events | 3976 |
| Total charging energy $(\mathrm{AC} \mathrm{kWh})$ | 10128 |



Time of Day When Charging


Time at the Start of Charging Events


[^1]
[^0]:    * Trips when the plug-in battery pack charge is depeleted to propel the vehicle throughout entire trip
    ** Trips when the plug-in battery pack is depleted to propel the vehicle for a portion of the trip, but is fully depleted prior to the end of the trip
    *** Trips when the plug-in battery pack is not used to propel the vehicle - either the plug-in battery is fully depleted before the beginning of the trip, or the plug-in battery pack is turned off
    $\wedge \quad$ "Number of trips with plug-in battery pack turned off by the vehicle operator" is a subset of number of trips in combined CD/CS and CS mode
    $\wedge \wedge \quad$ "Distance traveled with plug-in battery pack turned off" is a subset of distance traveled in combinecd CD/CD and CS modes

[^1]:    *Average duration of charging event is the average length of time per charging event when the vehicle was plugged into the electrical grid. Electrical energy was not necessarily drawn during the entire period when the vehicle was plugged in.

