

Vehicle Technologies Program

North American PHEV Demonstration

Annual Report for EnergyCS Prius (Altairnano Pack)

Number of vehicles: 2

Reporting period: Jan - Dec 2009

Number of days when the vehicle was driven: 218

All trips combined

Overall gasoline fuel economy (mpg)	56
Overall DC electrical energy consumption (DC Wh/mi) ²	49
Total number of trips	1395
Total distance traveled (mi)	10944

Trips in Charge Depleting mode (CD)³

Gasoline fuel economy (mpg)	63
DC electrical energy consumption (DC Wh/mi) ⁴	93
Number of trips	922
Percent of trips city / highway	74% / 26%
Distance traveled (mi)	3919
Percent of total distance traveled	36%

Trips in both Charge Depleting and Charge Sustaining modes (CD/CS)⁵

Gasoline fuel economy (mpg)	61
DC electrical energy consumption (DC Wh/mi) ⁶	52
Number of trips	91
Percent of trips city / highway	12% / 88%
Distance traveled (mi)	3245
Percent of total distance traveled	30%

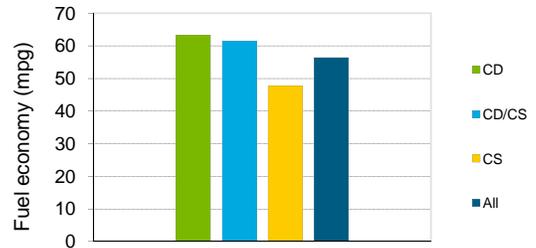
Trips in Charge Sustaining mode (CS)⁷

Gasoline fuel economy (mpg)	48
Number of trips	382
Percent of trips city / highway	66% / 34%
Distance traveled (mi)	3780
Percent of total distance traveled	35%

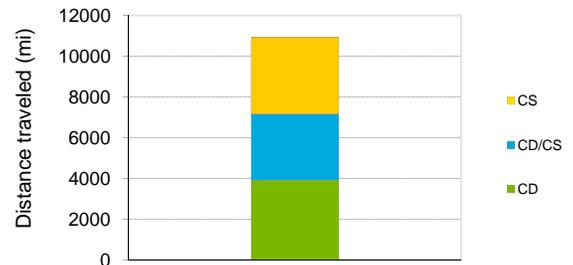
Plug-in charging

Number of charging events	261
Average number of charging events per day when vehicle driven	1.1
Average distance between charging events (mi)	41.9
Average number of trips between charging events	5.3
Average time charging per charging event (hr)	23.9
Average charging energy per charging event (DC kWh)	3.0
Total charging energy (DC kWh)	775.2

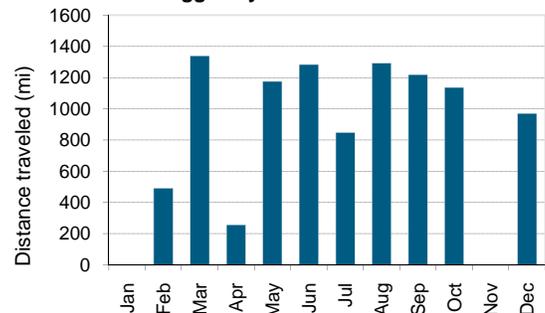
Gasoline Fuel Economy by Trip Type



Distance Traveled by Trip Type



Miles Logged by Month This Year



Notes: 1 - 9. Please see <http://avt.inl.gov/pdf/phev/ReportNotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

Trips in Charge Depleting mode (CD)

	City	Highway
Gasoline fuel economy (mpg)	49	76
DC electrical energy consumption (DC Wh/mi)	86	97
Percent of miles with internal combustion engine off	28%	9%
Average trip aggressiveness (on scale 0 - 10)	1.4	1.1
Average trip distance (mi)	2.1	10.4

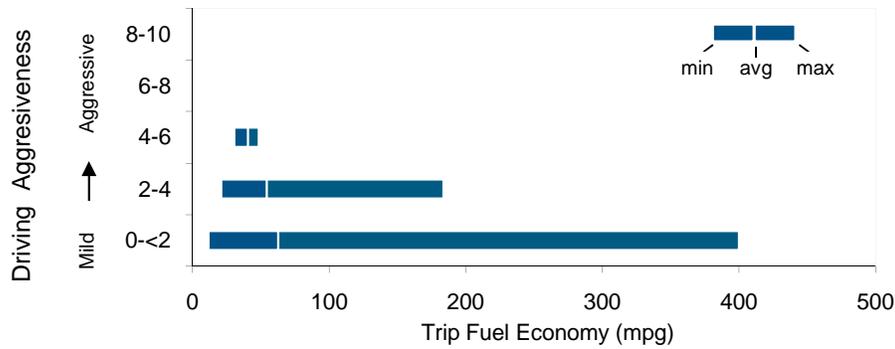
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes

Gasoline fuel economy (mpg)	49	62
DC electrical energy consumption (DC Wh/mi)	94	51
Percent of miles with internal combustion engine off	27%	5%
Average trip aggressiveness (on scale 0 - 10)	1.3	1.0
Average trip distance (mi)	6.2	39.7

Trips in Charge Sustaining (CS) mode

Gasoline fuel economy (mpg)	35	50
Percent of miles with internal combustion engine off	23%	4%
Average trip aggressiveness (on scale 0 - 10)	1.4	0.9
Average trip distance (mi)	1.7	26.0

Effect of Driving Aggressiveness on Fuel Economy This Month



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

Trip Fuel Economy Distribution by Trip Type

