# Ford Escape Advanced Research Fleet

Number of vehicles:	21
Reporting period:	Julv 2010

U.S. DEPARTMENT OF

Date range of data received:07/0Number of vehicle days driven:294

07/01/2010 to 07/31/2010

# All Trips Combined

I	
Overall gasoline fuel economy (mpg)	36
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	98
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	63
Total number of trips	1,388
Total distance traveled (mi)	16,479

### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	45
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	146
Number of trips	895
Percent of trips city   highway	86%   14%
Distance traveled (mi)	4,888
Percent of total distance traveled	30%

#### Gasoline Fuel Economy By Trip Type



## Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	35
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	45
Number of trips	236
Percent of trips city   highway	27%   73%
Distance traveled (mi)	7,752
Percent of total distance traveled	47%

### Trips in Charge Sustaining (CS) mode7

Gasoline fuel economy (mpg)	29
Number of trips	257
Percent of trips city   highway	69%   31%
Distance traveled (mi)	3,838
Percent of total distance traveled	23%

Distance Traveled By Trip Type



Notes: 1 - 7. Please see http://avt.inl.gov/pdf/phev/fordreportnotes.pdf for an explanation of all PHEV Fleet Testing Report notes.

Since these vehicles are flex-fuel capable, some driving events are conducted with E-85, which may decrease fuel economy results

"The Ford Escape Advanced Research Fleet was designed as a demonstration of customer duty cycles related to plug-in electric vehicles. The vehicles used in this demonstration have not been optimized to provide the maximum potential fuel economy."



## VEHICLE TECHNOLOGIES PROGRAM

Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	40	54
DC electrical energy consumption (DC Wh/mi)	140	151
Percent of miles with internal combustion engine off	31%	7%
Average trip driving intensity (Wh/mi)	273	307
Average trip distance (mi)	3	20
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	35	35
DC electrical energy consumption (DC Wh/mi)	59	44
Percent of miles with internal combustion engine off	22%	3%
Average trip driving intensity (Wh/mi)	287	333
Average trip distance (mi)	7	42
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	25	30
Percent of miles with internal combustion engine off	18%	1%
Average trip driving intensity (Wh/mi)	263	334

3

41

Average trip distance (mi)







Trip Fuel Economy (mpg)



Plug-in charging		
Average number of charging events per vehicle per month when driven	53	
Average number of charging events per vehicle per day when driven	3.8	
Average distance driven between charging events (mi)	14.7	
Average number of trips between charging events	1.2	
Average time plugged in per charging event (hr)	5.3	
Average time charging per charging event (hr)	1.0	
Average energy per charging event (AC kWh)	1.4	
Average charging energy per vehicle per month (AC kWh)	76.9	
Total number of charging events	1,120	
Total charging energy (AC kWh)	1,614	

#### Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In



