## Ford Escape Advanced Research Fleet

Number of vehicles: 20
Reporting period: August 2011

## Date range of data received: 08/01/2011 to 08/31/2011 <br> Number of vehicle days driven: 287

## All Trips Combined

| Overall gasoline fuel economy (mpg) | 38 |
| :--- | ---: |
| Overall AC electrical energy consumption (AC Wh/mi) ${ }^{1}$ | 89 |
| Overall DC electrical energy consumption (DC Wh/mi) ${ }^{2}$ | 61 |
| Total number of trips | 1,509 |
| Total distance traveled (mi) | 19,521 |
|  |  |
| Trips in Charge Depleting (CD) mode ${ }^{3}$ | 53 |
| Gasoline fuel economy (mpg) | 143 |
| DC electrical energy consumption (DC Wh/mi) |  |
| Number of trips | 971 |
| Percent of trips city \| highway | $82 \% \mid 18 \%$ |
| Distance traveled (mi) | 6,119 |
| Percent of total distance traveled | $31 \%$ |

Trips in both Charge Depleting \& Charge Sustaining (CD/CS) modes ${ }^{5}$

| Gasoline fuel economy (mpg) | 36 |
| :--- | ---: |
| DC electrical energy consumption (DC Wh/mi) |  |
| Number of trips | 43 |
| Percent of trips city \| highway | 282 |
| Distance traveled (mi) | $71 \%$ |
| Percent of total distance traveled | 8,380 |
|  | $43 \%$ |
| Trips in Charge Sustaining (CS) mode ${ }^{\mathbf{7}}$ |  |
| Gasoline fuel economy (mpg) | 31 |
| Number of trips | 255 |
| Percent of trips city \| highway | $61 \% \mid 39 \%$ |
| Distance traveled (mi) | 5,023 |
| Percent of total distance traveled | $26 \%$ |



[^0]| Trips in Charge Depleting (CD) mode | City | Highway |
| :--- | ---: | ---: | :--- |
| Gasoline fuel economy (mpg) | 48 | 57 |
| DC electrical energy consumption (DC Wh/mi) | 141 | 145 |
| Percent of miles with internal combustion engine off | $35 \%$ | $8 \%$ |
| Average trip driving intensity (Wh/mi) | 272 | 309 |
| Average trip distance (mi) | 3 | 19 |

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

| Gasoline fuel economy (mpg) | 38 | 36 |
| :--- | ---: | ---: | :--- |
| DC electrical energy consumption (DC Wh/mi) | 49 | 43 |
| Percent of miles with internal combustion engine off | $24 \%$ | $4 \%$ |
| Average trip driving intensity $(\mathrm{Wh} / \mathrm{mi})$ | 274 | 332 |
| Average trip distance (mi) | 9 | 39 |

Trips in Charge Sustaining (CS) mode

| Gasoline fuel economy (mpg) | 29 | 32 |
| :--- | ---: | ---: |
| Percent of miles with internal combustion engine off | $20 \%$ | $6 \%$ |
| Average trip driving intensity $(\mathrm{Wh} / \mathrm{mi})$ | 252 | 319 |
| Average trip distance $(\mathrm{mi})$ | 5 | 43 |

Effect Of Driving Intensity (Wheel Energy) on Fuel Economy This Month


Trip Fuel Economy Distribution By Trip Type


## Plug-in charging

| Average number of charging events per vehicle per month when driven | 38 |
| :--- | :---: |
| Average number of charging events per vehicle per day when driven | 2.5 |
| Average distance driven between charging events (mi) | 26.9 |
| Average number of trips between charging events | 2.1 |
| Average time plugged in per charging event (hr) | 5.5 |
| Average time charging per charging event (hr) | 1.7 |
| Average energy per charging event (AC kWh) | 2.4 |
| Average charging energy per vehicle per month (AC kWh) | 91.2 |
| Total number of charging events | 727 |
| Total charging energy (AC kWh) | 1,733 |

Time of Day When Driving


Time of Day When Charging


Time of Day When Plugging In



[^0]:    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."

