## Ford Escape Advanced Research Fleet

Number of vehicles: 18
Reporting period: October 2011

Date range of data received: $\quad 10 / 01 / 2011$ to 10/31/2011
Number of vehicle days driven: 270

## All Trips Combined

| Overall gasoline fuel economy (mpg) | 41 |
| :--- | ---: |
| Overall AC electrical energy consumption $(\mathrm{AC} \mathrm{Wh} / \mathrm{mi})^{1}$ | 109 |
| Overall DC electrical energy consumption $(\mathrm{DC} \mathrm{Wh} / \mathrm{mi})^{2}$ | 73 |
| Total number of trips | 1,476 |
| Total distance traveled (mi) | 17,810 |

Trips in Charge Depleting (CD) mode ${ }^{3}$

| Gasoline fuel economy (mpg) | 52 |
| :--- | ---: |
| DC electrical energy consumption (DC Wh/mi) | 4 |
| Number of trips | 146 |
| Percent of trips city \| highway | 870 |
| Distance traveled (mi) | $79 \% \mid 21 \%$ |
| Percent of total distance traveled | 6,620 |

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

| Gasoline fuel economy (mpg) | 39 |
| :--- | ---: |
| DC electrical energy consumption (DC Wh/mi) |  |
| Number of trips | 52 |
| Percent of trips city \| highway | 301 |
| Distance traveled (mi) | $37 \% / 63 \%$ |
| Percent of total distance traveled | 7,173 |
|  | $40 \%$ |
| Trips in Charge Sustaining (CS) mode7 |  |
| Gasoline fuel economy (mpg) | 34 |
| Number of trips | 304 |
| Percent of trips city \| highway | $67 \% \mid 33 \%$ |
| Distance traveled (mi) | 4,017 |
| Percent of total distance traveled | $23 \%$ |



[^0]| Trips in Charge Depleting (CD) mode | City | Highway |
| :--- | ---: | ---: |
| Gasoline fuel economy (mpg) | 48 | 54 |
| DC electrical energy consumption (DC Wh/mi) | 146 | 146 |
| Percent of miles with internal combustion engine off | $33 \%$ | $11 \%$ |
| Average trip driving intensity (Wh/mi) | 288 | 321 |
| Average trip distance (mi) | 4 | 22 |

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

| Gasoline fuel economy (mpg) | 43 | 38 |
| :--- | ---: | ---: | :--- |
| DC electrical energy consumption (DC Wh/mi) | 60 | 51 |
| Percent of miles with internal combustion engine off | $29 \%$ | $6 \%$ |
| Average trip driving intensity (Wh/mi) | 289 | 333 |
| Average trip distance (mi) | 8 | 33 |
| Trips in Charge Sustaining (CS) mode |  |  |
| Gasoline fuel economy (mpg) | 34 | 34 |
| Percent of miles with internal combustion engine off | $27 \%$ | $5 \%$ |
| Average trip driving intensity (Wh/mi) | 276 | 324 |
| Average trip distance (mi) | 4 | 31 |

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 | 31 |
| :--- | ---: |
| Average number of charging events per vehicle per day when driven | 2.1 |
| Average distance driven between charging events (mi) | 31.7 |
| Average number of trips between charging events | 2.6 |
| Average time plugged in per charging event (hr) | 8.2 |
| Average time charging per charging event (hr) | 2.5 |
| Average energy per charging event (AC kWh) | 3.5 |
| Average charging energy per vehicle per month (AC kWh) | 108.3 |
| Total number of charging events | 562 |
| Total charging energy (AC kWh) | 1,950 |

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."

