## Ford Escape Advanced Research Fleet

Number of vehicles: 20
Reporting period: May 2011

## Date range of data received: 05/01/2011 to 05/31/2011 <br> Number of vehicle days driven: 305

## All Trips Combined

| Overall gasoline fuel economy (mpg) | 40 |
| :---: | :---: |
| Overall AC electrical energy consumption (AC Wh/mi) ${ }^{1}$ | 88 |
| Overall DC electrical energy consumption ( $\mathrm{DC} \mathrm{Wh} / \mathrm{mi})^{2}$ | 60 |
| Total number of trips | 1,528 |
| Total distance traveled (mi) | 18,774 |

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

| Gasoline fuel economy (mpg) | 64 |
| :--- | ---: |
| DC electrical energy consumption (DC Wh/mi) $)^{4}$ | 173 |
| Number of trips | 827 |
| Percent of trips city \| highway | $88 \%$ |
| Distance traveled (mi) | $12 \%$ |
| Percent of total distance traveled | 4,279 |

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

| Gasoline fuel economy (mpg) | 38 |
| :--- | ---: |
| DC electrical energy consumption (DC Wh/mi) | 49 |
| Number of trips | 304 |
| Percent of trips city \| highway | $35 \% / 65 \%$ |
| Distance traveled (mi) | 8,685 |
| Percent of total distance traveled | $46 \%$ |
|  |  |
| Trips in Charge Sustaining (CS) mode ${ }^{6}$ |  |
| Gasoline fuel economy (mpg) | 32 |
| Number of trips | 396 |
| Percent of trips city \| highway | $70 \% \mid 30 \%$ |
| Distance traveled (mi) | 5,810 |
| Percent of total distance traveled | $31 \%$ |



[^0]| Trips in Charge Depleting (CD) mode | City | Highway |
| :--- | ---: | ---: |
| Gasoline fuel economy (mpg) | 64 | 63 |
| DC electrical energy consumption (DC Wh/mi) | 176 | 167 |
| Percent of miles with internal combustion engine off | $53 \%$ | $14 \%$ |
| Average trip driving intensity (Wh/mi) | 271 | 291 |
| Average trip distance (mi) | 3 | 19 |

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

|  |  | 43 | 38 |
| :--- | ---: | ---: | :--- |
| Gasoline fuel economy (mpg) | 63 | 48 |  |
| DC electrical energy consumption (DC Wh/mi) | $31 \%$ | $6 \%$ |  |
| Percent of miles with internal combustion engine off | 288 | 320 |  |
| Average trip driving intensity (Wh/mi) | 7 | 40 |  |
| Average trip distance (mi) |  |  |  |
| Trips in Charge Sustaining (CS) mode | 30 | 33 |  |
| Gasoline fuel economy (mpg) | $23 \%$ | $3 \%$ |  |
| Percent of miles with internal combustion engine off | 268 | 318 |  |
| Average trip driving intensity (Wh/mi) | 4 | 39 |  |
| Average trip distance (mi) |  |  |  |

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 | 32 |
| :--- | :---: |
| Average number of charging events per vehicle per day when driven | 2.1 |
| Average distance driven between charging events (mi) | 29.0 |
| Average number of trips between charging events | 2.4 |
| Average time plugged in per charging event (hr) | 6.2 |
| Average time charging per charging event (hr) | 1.8 |
| Average energy per charging event (AC kWh) | 2.6 |
| Average charging energy per vehicle per month (AC kWh) | 82.7 |
| Total number of charging events | 648 |
| Total charging energy (AC kWh) | 1,653 |

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."

