

About the EV Project Reports

The EV Project fact sheets and reports are based on data from several different sources (vehicle manufacturers and electric vehicle charging infrastructure - EVSE), and these multiple data streams introduce variables in reporting that do not normally occur when data is collected from a single source. Matching vehicle data to charging data, both from different data streams, result in what may seem to be reporting inconsistencies. Examples from the EV Project Overview Report for January to March 2011 (Overview report) and the EV Project Nissan Leaf Vehicle Summary Report for January to March 2011 (Leaf report) are given below that help highlight what may be perceived as reporting inconsistencies, but are in fact, accurate results.

- The Overview report lists a total of 51 Nissan Leafs as being deployed in all regions, while the Leaf report provides information for 35 Leafs, which is a subset of the 51 Leafs. The Leaf report is only reporting the charging and driving results for the 35 Leafs with both driving data and charging data for each respective vehicle.
- The Leaf report lists a total of 21,706 miles being driven while the Overview report lists 44,467 miles being driven. The 44,467 miles covers all miles reported driven, with no regard to matching charging data or when the Leafs entered the EV Project.
- The Leaf report lists 5.31 AC MWh being used to charge the 35 Leafs and 21,706 miles driven. The miles driven cannot be divided by the MWh to get the miles per kWh efficiency because 20% (208) of the charging events occurred outside of the EV Project. The magnitude of this energy is not captured, and therefore, it is not possible to estimate if these charging events represent, 10, 20, 30 or some other percentage of the energy used to charge the vehicles for the 21,706 miles of driving. It is possible to identify these non-EV Project charging events because beyond a filtering threshold, battery state-of-charge (SOC) increases during vehicle rest-periods allow the determination that a non-EV Project charging event occurred, even though none of the EV Project EVSE reported a charging event. The non-EV Project charging events can include charging at 110V and non-EV Project EVSE, neither of which is equipped with meters or communication what could provide charging data to the INL.

Note that the above discussion is only concerned with Nissan Leafs that are participants in the EV Project. Nissan has sold more Leafs in the United States than reported by the EV Project. It should also be noted that the EVSE is being deployed in greater numbers and faster than the vehicles are being deployed, so there will always be higher reported numbers of EVSE than vehicles. In addition, these reports only include EVSE after they are reported as being used for the first time. During the January – March quarterly reporting period, this number was at 107 EVSE in all regions. However, when the reports were generated, ECOtality had already deployed approximately 1,000 EV Project EVSE nationally.

More in-depth discussions of the data reporting will be provided in future reports, technical papers and industry gatherings that are better venues for detailed reporting results discussions. Note that as the sample size increases, regional reports will also be published.