Input for EVE concerning durability requirements on electrified vehicles

Discussion basis:
Table provided by EVE-group (EVE-19-05e)

Table from IWG EVE to IWG WLTP (forwarded to WLTP Subgroup EV)

- Matrix of durability requirements from EVE for WLTP to consider
- EVE asked for input from WLTP

Key information needs for EV durability

Vehicle Architecture	Criteria Pollutants	CO_2 / Energy Consumption	Range
HEV	???	???	X
PHEV	???	???	???
PEV	X	???	???

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- U.S. as an example

Vehicle Architecture	Criteria Pollutants	CO₂ / Energy Consumption	Range
HEV	@ 150,000 miles or 10 years, vehicle must meet std	+10% from cert value @ 125,000 miles or 10 years	X
PHEV	@ 150,000 miles or 10 years, vehicle must meet std	+10% from cert value @ 125,000 miles or 10 years	X
PEV	X	X	X

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EC proposal (under discussion)

	air pollutants	CO_2/energy consumption	range
HEV	(5 year or 100,000 km must meet EU standards)	(max + 10% from certified values within 5 year or 100,000 km)	X
PHEV	(5 year or 100,000 km must meet EU standards)	(> 90% of certified Charge Depleting values within 5 year or 100,000 km)	X To develop a methodology to verify the durability of battery under real-world usage, and estimate the range decrease. This aims at: (1) Guarantee the customer with a minimum durability; (2) Set comparable conditions to estimate the overall performance of vehicles.
PEV	X	X	(> 90% of certified range within 5 year or 100,000 km) It is necessary to develop a methodology to verify the durability of battery under real-world usage, and estimate the range decrease. This aims at : (1) Guarantee the customer with a minimum durability; (2) Guarantee the minimum environmental performance of the vehicle; (3) Set comparable conditions to estimate the overall performance of electric vehicles.