

System Power Determination

Status of Validation Program

28th EVE, Ottawa, October 2018

Vehicles being tested

Participant	Location	Vehicles	Hybrid type	Powertrain type
Canada (ECCC)	Ottawa	2016 Chevy Volt 2018 BMW 530e	OVC-HEV OVC-HEV	Series PHEV (EREV) Parallel (blended)
USA (EPA)	Ann Arbor	2013 Malibu Eco 2013 Chevy Volt	NOVC-HEV OVC-HEV	Mild HEV (BISG) Series PHEV (EREV)
EU (JRC)	Ispra	Volvo Hyundai	OVC-HEV NOVC-HEV	Parallel TTR 4WD P2 2WD ?
Korea (KATRI)		TBA	TBA	TBA
Japan (JARI)*		2015 Yaris Hybrid 2015 Honda Fit Hybrid 2016 Outlander PHEV	NOVC-HEV NOVC-HEV OVC-HEV	Power split Parallel 2WD Parallel (with 3 modes)
		*completed previously		

Electrified vehicles – Current coverage

- NOVC-HEV
 - Mild HEV (CISG, BISG 😊)
 - Strong HEV (Power split 😊, P2 😊)
- OVC-HEV
 - Fully electric CD @ max acceleration – a.k.a. EREV
 - Higher power in CD mode (e.g. BMW i3)
 - Higher power in CS mode (possibly Chevy Volt) 😊
 - Not fully electric CD @ max acceleration (a.k.a. “blended”) 😊
- PEV
 - Single drive motor [not applicable]
 - Multiple drive motors

Validation program – recent developments

- Canada has completed translation of additional part of JARI report
- Japan and US visited JRC Ispra June 11-12 for pre-testing exercise
 - Volvo provided test vehicle and technical expert
 - Successfully instrumented Volvo vehicle and performed exploratory testing
- JRC has completed testing on Volvo and Hyundai vehicles
 - Results under review by Volvo and Hyundai
 - Limited discussion of JRC results will take place today
- EPA has tested 2013 Chevrolet Volt and 2013 Malibu Eco
- Canada has begun testing of 2016 Volt and 2018 BMW 530e
- Korea to report on recent testing results