

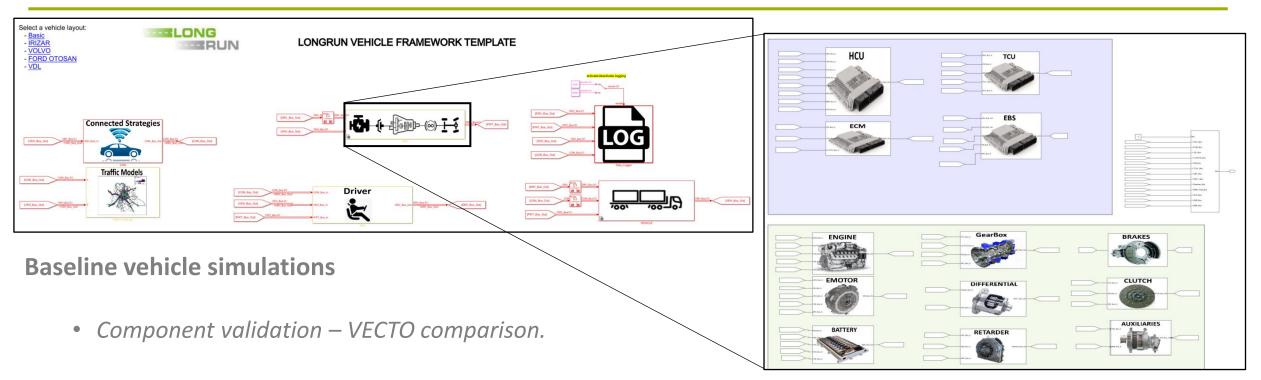
LONGRUN simulation platform status

LONGRUN

14th of November 2022



LONGRUN simulation platform - Status

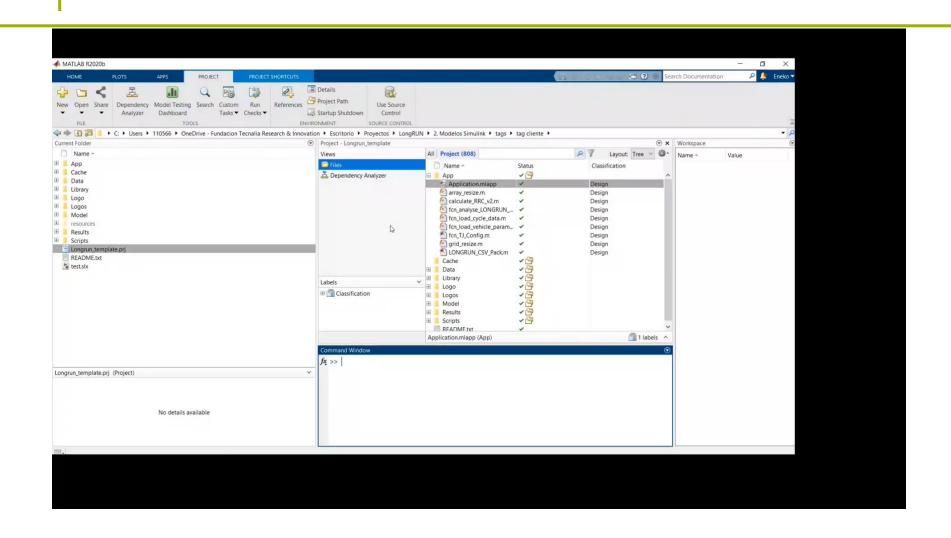


Hybrid vehicle simulations

• Parallel and serial hybrids – Comparison with a combustion vehicle with the same characteristics.



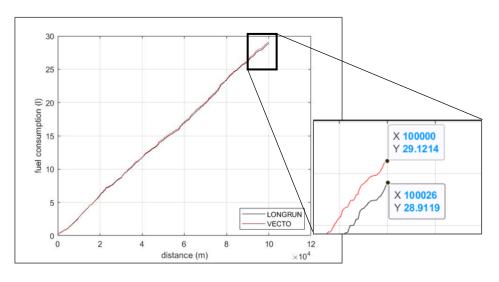
How to run the simulations





LONGRUN simulation Results

Baseline vehicle results



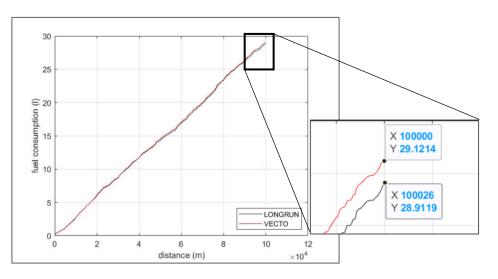
Fuel consumption vs distance for Class 2 in Urban Delivery cycle

% error in FC	Class 2	Class 5	Class 9	
Long Haul	0.23	2.38	0.4	
Regional Delivery	0.85	1.1	2.1	
Urban Delivery	0.72	0.62	-	



LONGRUN simulation Results

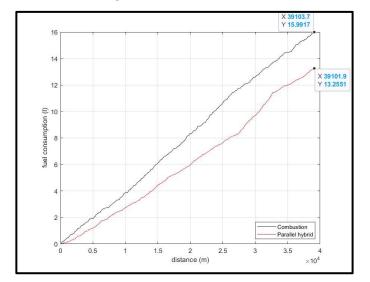
Baseline vehicle results

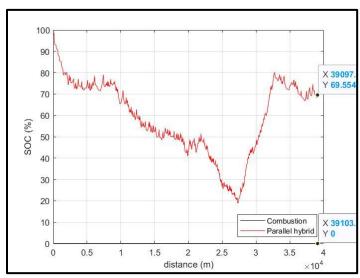


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Parallel Hybrid vehicle results





Fuel consumption vs distance and SOC vs distance for Parallel Hybrid in Urban cycle

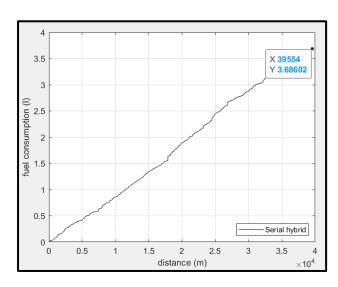
	Fuel Consumption (I)	SOC consumption (%)	Electric Consumption (kWh)	Total Consumption (I)
Combustion vehicle	15.99	0	0	15.99
Parallel hybrid vehicle	13.26	30.5	3.05	13.87

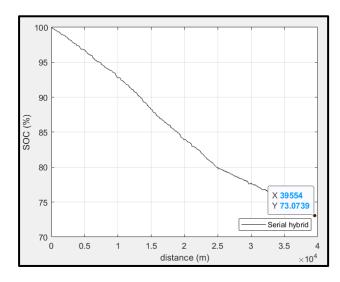
-13.3%



LONGRUN simulation Results

Serial Hybrid vehicle results





• Comparison with combustion vehicle of the same characteristics ongoing.

Fuel consumption vs distance and SOC vs distance for Serial Hybrid in Urban cycle

	Fuel Consumption (I)	SOC Consumption (%)	Electric Consumption (kWh)	Electric Consumption (I)	Total Consumption (I)
Serial Hybrid	3.68	27	66.15	14.55	18.23



Open questions



LONGRUN SIMULATION PLATFORM - LONGRUN (h2020-longrun.eu)

Thank you





























































