

# Global Glossary of ALPHA Output Variable Names

(March 8, 2023)

Variable Name	units	Definition
Configuration	#	The simulation's run number in a batch run
Vehicle Type		Type of vehicle
Package		Identifies the contents of the technology package specified for the simulation
Network Path		File pathway to the data storage
Filename		Name of the .csv file where this data is saved
Test Weight lbs	lbs	Vehicle Test Weight
RL A lbf	lbf	Roadload A coefficient
RL B lbf/mph	lbf/mph	Roadload B coefficient
RL C lbf/mph <sup>2</sup>	lbf/mph <sup>2</sup>	Roadload C coefficient
RL_ADJ A lbf	lbf	Adjustment factor to Roadload A coefficient to account for transmission related losses that are already accounted for in the roadload A, B, C coefficients
RL_ADJ B lbf/mph	lbf/mph	Adjustment factor to Roadload B coefficient to account for transmission related losses that are already accounted for in the roadload A, B, C coefficients
RL_ADJ C lbf/mph <sup>2</sup>	lbf/mph <sup>2</sup>	Adjustment factor to Roadload C coefficient to account for transmission related losses that are already accounted for in the roadload A, B, C coefficients
RL hp @ 50 mph	hp	Vehicle's horsepower at 50 miles per hour
Shift Norm	#	Sets the ALPHA shift calibration to be "normalized"
Transient Penalty	#	Fuel penalty for transient engine acceleration events
Start Stop		Identifies if the engine has start-stop capability
DEAC Scale	%	Percentage of time an engine actually operates in cylinder deactivation mode relative to when it could potentially be operating in deac mode
Electric	Name	Name of a parameter file for battery, alternator, starter, etc.
Accessory	Name	Name of a parameter file for accessory loads
Transmission	Name	Name of the transmission's ALPHA Input file
Transmission Vintage		if present, it overrides the vintage specified in the base transmission.
Transmission Torque Rating Nm	Nm	Transmission peak torque rating
Gear Count	#	Number of transmission gears
Gear Ratios		List of gear ratio for each transmission gear
FDR	#	Final drive gear ratio
AVG FDR Efficiency	%	Average efficiency of final drive gear
N/V	#	Primemover rpm (engine or emotor)/vehicle mph in top transmission gear
N @ 60MPH	#	Primemover rpm (engine or emotor) at 60 mph
Min Speed RPM	RPM	Minimum engine speed
Upshift Min Speed RPM	RPM	Minimum speed the engine can operate at after an upshift
K Factor RPM/sqrt(Nm)	RPM/sqrt(Nm)	Torque converter K factor
Torque Ratio	#	Torque multiplication at torque converter stall
Engine	Filename	ALPHA Input file of the base engine component
Engine	Name	ALPHA's internal name of the resized engine
Engine Displacement L	L	Engine displacement in liters as simulated (after resizing base engine component)
Engine Cylinders	#	Number of engine cylinders as simulated (after resizing base engine component)
Engine Max Power kW	kW	Peak engine power

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Engine Max Torque Nm	Nm	Peak engine torque
Engine Inertia kg-m2	kg-m^2	Engine inertia
Engine Max Eff. %	%	Engine's peak efficiency
Engine Min BSFC g/kWh	g/kWh	Engine's minimum BSFC
Engine Fuel ID	ID	Identifier of the fuel used for the simulation
Fast Fuel Torque Norm	#	Portion of fast torque reduction to apply for fuel map interpolation (0= gasoline, 1= diesel)
Engine Refuel Limit g/s	g/s	maximum penalty for engine refueling after decel fuel cut off
Engine Throttle/Power Time Const secs	secs	Time constant of engine power in reaction to throttle change
Engine Boost secs	secs	Time delay for turbo boost to kick in
zero to thirty time	sec	Time to accelerate from 0 to 30 MPH during the performance test
zero to sixty time	sec	Time to accelerate from 0 to 60 MPH during the performance test
thirty to fifty time	sec	Time to accelerate from 30 to 50 MPH during the performance test
forty to sixty time	sec	Time to accelerate from 40 to 60 MPH during the performance test
fifty to seventy time	sec	Time to accelerate from 50 to 70 MPH during the performance test
quarter mi time	sec	Time to accelerate a quarter mile during the performance test
total performance time	sec	Sum of all the performance test times
quarter mile speed	MPH	vehicle speed at one quarter mile during the performance test
top speed	MPH	Top speed achieved over the performance drive cycle
gradeability %	%	Maximum grade that can maintain 55 MPH
Energy Conservation %		Percentage energy accounted for in the simulation versus of energy consumed (from fuel or battery)
ETW_HP	LB/HP	ratio of vehicle's Equivalent Test Weight over vehicle's peak horsepower
RLHP20	HP/LB	ratio of vehicle's roadload horsepower at 20 mph over Equivalent Test Weight
RLHP60	HP/LB	ratio of vehicle's roadload horsepower at 60 mph over Equivalent Test Weight
HP_ETW	HP/LB	ratio of vehicle's peak horsepower over vehicle's Equivalent Test Weight
ETW	lbs	vehicle's Equivalent Test Weight
<b>Electrified Component Data</b>		
Prop battery mfile name	name	.m file name for the propulsion battery
Prop Batt Nom V	V	nominal voltage of the propulsion battery
Prop Batt Ah	Ah	nominal amperage the propulsion battery can provide in 1 hour
Prop Batt Nom kWh	kWh	nominal power (kW) of the propulsion battery can provide in 1 hour
Initial Prop. Battery V	V	Initial voltage of the propulsion battery at the start of the simulation
Initial Prop. Battery SoC	%	Initial state of charge of the propulsion battery at the start of the simulation
Final Prop. Battery SoC	%	Final state of charge of the propulsion battery at the end of the simulation
EPA_FTP_1 Prop. Battery Delta SoC	%	propulsion battery state of charge at the end of phase 1 of the EPA Federal Test Procedure
EPA_FTP_2 Prop. Battery Delta SoC	%	propulsion battery state of charge at the end of phase 2 of the EPA Federal Test Procedure
EPA_FTP_3 Prop. Battery Delta SoC	%	propulsion battery state of charge at the end of phase 3 of the EPA Federal Test Procedure

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Variable Name	units	Definition
EPA_FTP_4 Prop. Battery Delta SoC	%	propulsion battery state of charge at the end of phase 4 of the EPA Federal Test Procedure
EPA_HWFET Prop. Battery Delta SoC	%	propulsion battery state of charge at the end of the EPA Highway Fuel Economy test
EPA_US06_1 Prop. Battery Delta SoC	%	propulsion battery state of charge at the end of phase 1 of the EPA US06 test
EPA_US06_2 Prop. Battery Delta SoC	%	propulsion battery state of charge at the end of phase 2 of the EPA US06 test
Max Prop. Battery SoC	%	Maximum state of charge of the propulsion battery during the simulation
Min Prop. Battery SoC	%	Minimum state of charge of the propulsion battery during the simulation
MG0 Motor	Filename	.m file name for this e-motor ALPHA Input
MG0 emotor	name	Component name for this e-motor
MG0_kW	kW	peak traction power rating of this e-motor
MG0 emotor Max Torque Nm	Nm	Max torque of this e-motor
MG0 Motor Max Regen Power kW	kW	peak regen power rating of this e-motor
MG0 emotor Inertia kg-m2	kg-m2	inertia of this e-motor
BISG Motor	Filename	.m file name for this e-motor ALPHA Input
BISG emotor	name	Component name for this e-motor
BISG_kW	kW	peak traction power rating of this e-motor
BISG emotor Max Torque Nm	Nm	Max torque of this e-motor
BISG Motor Max Regen Power kW	kW	peak regen power rating of this e-motor
BISG emotor Inertia kg-m2	kg-m2	inertia of this e-motor
MG1 Motor	Filename	.m file name for this e-motor ALPHA Input
MG1 emotor	name	Component name for this e-motor
MG1_kW	kW	peak traction power rating of this e-motor
MG1 emotor Max Torque Nm	Nm	Max torque of this e-motor
MG1 Motor Max Regen Power kW	kW	peak regen power rating of this e-motor
MG1 emotor Inertia kg-m2	kg-m2	inertia of this e-motor
MG2 Motor	Filename	.m file name for this e-motor ALPHA Input
MG2 emotor	name	Component name for this e-motor
MG2_kW	kW	peak traction power rating of this e-motor
EC	Nm	Max torque of this e-motor
MG2 Motor Max Regen Power kW	kW	peak regen power rating of this e-motor
MG2 emotor Inertia kg-m2	kg-m2	inertia of this e-motor
Traction Motor	Filename	.m file name for this e-motor ALPHA Input
Traction Motor	Name	Component name for this e-motor
Traction Motor Max Traction Power kW	kW	peak traction power rating of this e-motor
Traction Motor Max Traction Torque Nm	Nm	Max torque of this e-motor
Traction Motor Max Regen Power kW	kW	peak regen power rating of this e-motor

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Variable Name	units	Definition
Traction Motor Inertia kg-m2	kg-m^2	inertia of this e-motor
<b>Combined Summary Results for the FTP, HWFET and US06 Simulations</b>		
EPA_FTP Total VOL MPG	MPG	MPG over the combined Federal Test Procedure drive cycle
EPA_FTP GHG gCO2/mi	gCO2/mi	grams of CO2 produced per mile over the combined Federal Test Procedure drive cycle
EPA_FTP Electrical Consumption Wh/mi	Wh/mi	electrical energy per mile consumed from propulsion battery over the combined Federal Test Procedure drive cycle
EPA_FTP NEC/Fuel	NEC/fuel	Ratio of energy used from propulsion battery / fuel energy used over the cycle over the combined Federal Test Procedure drive cycle
EPA_HWFET Total VOL MPG	MPG	MPG over the Highway Fuel Economy Test drive cycle
EPA_HWFET GHG gCO2/mi	gCO2/mi	grams of CO2 produced per mile over the Highway Fuel Economy Test drive cycle
EPA_HWFET Electrical Consumption Wh/mi	Wh/mi	electrical energy per mile consumed from propulsion battery over the Highway Fuel Economy Test drive cycle
EPA_HWFET NEC/Fuel	NEC/fuel	Ratio of energy used from propulsion battery / fuel energy used over the cycle over the Highway Fuel Economy Test drive cycle
EPA_US06 Total VOL MPG	MPG	MPG over the combined US06 test
EPA_US06 GHG gCO2/mi	gCO2/mi	grams of CO2 produced per mile over the combined US06 test
EPA_US06 Electrical Consumption Wh/mi	Wh/mi	electrical energy per mile consumed from propulsion battery over the combined US06 test
EPA_US06 NEC/Fuel	NEC/fuel	Ratio of energy used from propulsion battery / fuel energy used over the cycle over the combined US06 test
<b>Individual Bag Results for the FTP, HWFET and US06 Simulations for Vehicles with an ICE</b>		
<b>EPA_FTP_1 Fuel Consumed</b>	g Fuel	Total grams of fuel consumed by the ICE over phase 1 of the Federal Test Procedure drive cycle
EPA_FTP_2 Fuel Consumed	g Fuel	grams of ICE fuel consumed over phase 2 of the Federal Test Procedure drive cycle
EPA_FTP_3 Fuel Consumed	g Fuel	grams of ICE fuel consumed over phase 3 of the Federal Test Procedure drive cycle
EPA_FTP_4 Fuel Consumed	g Fuel	grams of ICE fuel consumed over phase 4 of the Federal Test Procedure drive cycle
EPA_HWFET Fuel Consumed	g Fuel	grams of ICE fuel consumed over the Highway Fuel Economy Test
EPA_US06_1 Fuel Consumed	g Fuel	grams of ICE fuel consumed over phase 1 of the US06 test
EPA_US06_2 Fuel Consumed	g Fuel	grams of ICE fuel consumed over phase 2 of the US06 test
EPA_FTP_1 VOL MPG	VOL MPG	Volumetric MPG over phase 1 of the Federal Test Procedure drive cycle
EPA_FTP_2 VOL MPG	VOL MPG	Volumetric MPG over phase 2 of the Federal Test Procedure drive cycle
EPA_FTP_3 VOL MPG	VOL MPG	Volumetric MPG over phase 3 of the Federal Test Procedure drive cycle
EPA_FTP_4 VOL MPG	VOL MPG	Volumetric MPG over phase 4 of the Federal Test Procedure drive cycle
EPA_HWFET VOL MPG	VOL MPG	Volumetric MPG over the Highway Fuel Economy Test
EPA_US06_1 VOL MPG	VOL MPG	Volumetric MPG over phase 1 of the US06 test
EPA_US06_2 VOL MPG	VOL MPG	Volumetric MPG over phase 2 of the US06 test
EPA_FTP_1 gCO2/mi	gCO2/mi	grams of CO2 produced per mile over phase 1 of the Federal Test Procedure drive cycle
EPA_FTP_2 gCO2/mi	gCO2/mi	grams of CO2 produced per mile over phase 2 of the Federal Test Procedure drive cycle

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EPA_FTP_3 gCO2/mi	gCO2/mi	grams of CO2 produced per mile over phase 3 of the Federal Test Procedure drive cycle
EPA_FTP_4 gCO2/mi	gCO2/mi	grams of CO2 produced per mile over phase 4 of the Federal Test Procedure drive cycle
EPA_HWFET gCO2/mi	gCO2/mi	grams of CO2 produced per mile over the Highway Fuel Economy Test
EPA_US06_1 gCO2/mi	gCO2/mi	grams of CO2 produced per mile over phase 1 of the US06 test
EPA_US06_2 gCO2/mi	gCO2/mi	grams of CO2 produced per mile over phase 2 of the US06 test
<b>Individual Bag Results for the FTP, HWFET and US06 Simulations for Hybrid Electric Vehicles (HEVs)</b>		
<b>EPA_FTP_1 Electrical Consumption</b>	Wh/mi	The net energy change in propulsion battery / mile ( <b>NEC/mi</b> ) during phase 1 of EPA's Federal Test Procedure* (for HEVs)
EPA_FTP_2 Electrical Consumption	Wh/mi	The net energy change in propulsion battery / mile ( <b>NEC/mi</b> ) during phase 2 of EPA's Federal Test Procedure* (for HEVs)
EPA_FTP_3 Electrical Consumption	Wh/mi	The net energy change in propulsion battery / mile ( <b>NEC/mi</b> ) battery during phase 3 of EPA's Federal Test Procedure* (for HEVs)
EPA_FTP_4 Electrical Consumption	Wh/mi	The net energy change in propulsion battery / mile ( <b>NEC/mi</b> ) battery during phase 4 of EPA's Federal Test Procedure* (for HEVs)
EPA_HWFET Electrical Consumption	Wh/mi	The net energy change in propulsion battery / mile ( <b>NEC/mi</b> ) battery during EPA's Highway Fuel Economy Test* (for HEVs)
EPA_US06_1 Electrical Consumption	Wh/mi	The net energy change in propulsion battery / mile ( <b>NEC/mi</b> ) battery during phase 1 of EPA's US06 test* (for HEVs)
EPA_US06_2 Electrical Consumption	Wh/mi	The net energy change in propulsion battery / mile ( <b>NEC/mi</b> ) battery during phase 2 of EPA's US06 test* (for HEVs)
EPA_FTP_1 NEC/Fuel	%	Ratio of <b>EPA_FTP_1 Electrical Consumption</b> / <b>EPA_FTP_1 Fuel Consumed (converted to Wh/mi)</b> during phase 1 of EPA's Federal Test Procedure (for HEVs)
EPA_FTP_2 NEC/Fuel	%	Ratio of <b>EPA_FTP_2 Electrical Consumption</b> / <b>EPA_FTP_2 Fuel Consumed (converted to Wh/mi)</b> during phase 2 of EPA's Federal Test Procedure (for HEVs)
EPA_FTP_3 NEC/Fuel	%	Ratio of <b>EPA_FTP_3 Electrical Consumption</b> / <b>EPA_FTP_3 Fuel Consumed (converted to Wh/mi)</b> during phase 3 of EPA's Federal Test Procedure (for HEVs)
EPA_FTP_4 NEC/Fuel	%	Ratio of <b>EPA_FTP_4 Electrical Consumption</b> / <b>EPA_FTP_4 Fuel Consumed (converted to Wh/mi)</b> during phase 4 of EPA's Federal Test Procedure (for HEVs)
EPA_HWFET NEC/Fuel	%	Ratio of <b>EPA_FTP_4 Electrical Consumption</b> / <b>EPA_FTP_4 Fuel Consumed (converted to Wh/mi)</b> during EPA's Highway Fuel Economy Test (for HEVs)
EPA_US06_1 NEC/Fuel	%	Ratio of <b>EPA_US06_1 Electrical Consumption</b> / <b>EPA_US06_1 Fuel Consumed (converted to Wh/mi)</b> during phase 1 of EPA's UA06 test (for HEVs)
EPA_US06_2 NEC/Fuel	%	Ratio of <b>EPA_US06_2 Electrical Consumption</b> / <b>EPA_US06_2 Fuel Consumed (converted to Wh/mi)</b> during phase 2 of EPA's UA06 test (for HEVs)
<b>EPA_FTP_1 Electrical Equivalent Fuel</b>	g Fuel	Equivalent grams of fuel that must be consumed by the engine to produce <b>EPA_FTP_1 Electrical Consumption</b> during phase 1 of EPA's Federal Test Procedure (for HEVs).
EPA_FTP_2 Electrical Equivalent Fuel	g Fuel	Equivalent grams of fuel that must be consumed by the engine to produce <b>EPA_FTP_2 Electrical Consumption</b> during phase 2 of EPA's Federal Test Procedure in equivalent grams of fuel (for HEVs)

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EPA_FTP_3 Electrical Equivalent Fuel	g Fuel	Equivalent grams of fuel that must be consumed by the engine to produce <b>EPA_FTP_3 Electrical Consumption</b> during phase 3 of EPA's Federal Test Procedure in equivalent grams of fuel (for HEVs)
EPA_FTP_4 Electrical Equivalent Fuel	g Fuel	Equivalent grams of fuel that must be consumed by the engine to produce <b>EPA_FTP_4 Electrical Consumption</b> during phase 4 of EPA's Federal Test Procedure in equivalent grams of fuel (for HEVs)
EPA_HWFET Electrical Equivalent Fuel	g Fuel	Equivalent grams of fuel that must be consumed by the engine to produce <b>EPA_HWFET Electrical Consumption</b> during EPA's Highway Fuel Economy in equivalent grams of fuel (for HEVs)
EPA_US06_1 Electrical Equivalent Fuel	g Fuel	Equivalent grams of fuel that must be consumed by the engine to produce <b>EPA_US06_1 Electrical Consumption</b> during phase 1 of EPA's US06 test in equivalent grams of fuel (for HEVs)
EPA_US06_2 Electrical Equivalent Fuel	g Fuel	Equivalent grams of fuel that must be consumed by the engine to produce <b>EPA_US06_2 Electrical Consumption</b> during phase 2 of EPA's US06 test in equivalent grams of fuel (for HEVs)
<b>EPA_FTP_1 NEC Fuel Consumed</b>	g Fuel	Sum of <b>EPA_FTP_1 Fuel Consumed (g fuel)</b> + <b>EPA_FTP_1 Electrical Equivalent Fuel (g fuel)</b> during phase 1 of EPA's Federal Test Procedure (for HEVs)
EPA_FTP_2 NEC Fuel Consumed	g Fuel	Sum of <b>EPA_FTP_2 Fuel Consumed (g fuel)</b> + <b>EPA_FTP_2 Electrical Equivalent Fuel (g fuel)</b> during phase 2 of EPA's Federal Test Procedure in grams of fuel (for HEVs)
EPA_FTP_3 NEC Fuel Consumed	g Fuel	Sum of <b>EPA_FTP_3 Fuel Consumed (g fuel)</b> + <b>EPA_FTP_3 Electrical Equivalent Fuel (g fuel)</b> during phase 3 of EPA's Federal Test Procedure in grams of fuel (for HEVs)
EPA_FTP_4 NEC Fuel Consumed	g Fuel	Sum of <b>EPA_FTP_4 Fuel Consumed (g fuel)</b> + <b>EPA_FTP_4 Electrical Equivalent Fuel (g fuel)</b> during phase 4 of EPA's Federal Test Procedure in grams of fuel (for HEVs)
EPA_HWFET NEC Fuel Consumed	g Fuel	Sum of <b>EPA_HWFET Fuel Consumed (g fuel)</b> + <b>EPA_HWFET Electrical Equivalent Fuel (g fuel)</b> during EPA's Highway Fuel Economy Test in grams of fuel (for HEVs)
EPA_US06_1 NEC Fuel Consumed	g Fuel	Sum of <b>EPA_US06_1 Fuel Consumed (g fuel)</b> + <b>EPA_US06_1 Electrical Equivalent Fuel (g fuel)</b> during phase 1 of EPA's US06 test in grams of fuel (for HEVs)
EPA_US06_2 NEC Fuel Consumed	g Fuel	Sum of <b>EPA_US06_2 Fuel Consumed (g fuel)</b> + <b>EPA_US06_2 Electrical Equivalent Fuel (g fuel)</b> during phase 2 of EPA's US06 test in grams of fuel (for HEVs)
EPA_FTP_1 VOL MPG (Net Energy Corrected)	NEC MPG	<b>EPA_FTP_1 NEC Fuel Consumed (converted to MPG)</b> during phase 1 of EPA's Federal Test Procedure (for HEVs)
EPA_FTP_2 VOL MPG (Net Energy Corrected)	NEC MPG	<b>EPA_FTP_2 NEC Fuel Consumed (converted to MPG)</b> during phase 2 of EPA's Federal Test Procedure (for HEVs)
EPA_FTP_3 VOL MPG (Net Energy Corrected)	NEC MPG	<b>EPA_FTP_3 NEC Fuel Consumed (converted to MPG)</b> during phase 3 of EPA's Federal Test Procedure (for HEVs)
EPA_FTP_4 VOL MPG (Net Energy Corrected)	NEC MPG	<b>EPA_FTP_4 NEC Fuel Consumed (converted to MPG)</b> during phase 4 of EPA's Federal Test Procedure (for HEVs)
EPA_HWFET VOL MPG (Net Energy Corrected)	NEC MPG	<b>EPA_HWFET NEC Fuel Consumed (converted to MPG)</b> during EPA's Highway Fuel Economy Test (for HEVs)
EPA_US06_1 VOL MPG (Net Energy Corrected)	NEC MPG	<b>EPA_US06_1 NEC Fuel Consumed (converted to MPG)</b> during phase 1 of EPA's US06 test (for HEVs)

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EPA_US06_2 VOL MPG (Net Energy Corrected)	NEC MPG	<b>EPA_US06_2 NEC Fuel Consumed (converted to MPG)</b> during phase 2 of EPA's US06 test (for HEVs)
EPA_FTP_1 GHG gCO2/mi (Net Energy Corrected)	NEC gCO2/mi	<b>EPA_FTP_1 NEC Fuel Consumed (converted to gCO2/mi)</b> during phase 1 of EPA's Federal Test Procedure (for HEVs)
EPA_FTP_2 GHG gCO2/mi (Net Energy Corrected)	NEC gCO2/mi	<b>EPA_FTP_2 NEC Fuel Consumed (converted to gCO2/mi)</b> during phase 2 of EPA's Federal Test Procedure (for HEVs)
EPA_FTP_3 GHG gCO2/mi (Net Energy Corrected)	NEC gCO2/mi	<b>EPA_FTP_3 NEC Fuel Consumed (converted to gCO2/mi)</b> during phase 3 of EPA's Federal Test Procedure (for HEVs)
EPA_FTP_4 GHG gCO2/mi (Net Energy Corrected)	NEC gCO2/mi	<b>EPA_FTP_4 NEC Fuel Consumed (converted to gCO2/mi)</b> during phase 4 of EPA's Federal Test Procedure (for HEVs)
EPA_HWFET GHG gCO2/mi (Net Energy Corrected)	NEC gCO2/mi	<b>EPA_HWFET NEC Fuel Consumed (converted to gCO2/mi)</b> during Highway Fuel Economy Test (for HEVs)
EPA_US06_1 GHG gCO2/mi (Net Energy Corrected)	NEC gCO2/mi	<b>EPA_US06_1 NEC Fuel Consumed (converted to gCO2/mi)</b> during phase 1 of the US06 test (for HEVs)
EPA_US06_2 GHG gCO2/mi (Net Energy Corrected)	NEC gCO2/mi	<b>EPA_US06_2 NEC Fuel Consumed (converted to gCO2/mi)</b> during phase 2 of the US06 test (for HEVs)
<b>Individual Bag Results for the FTP, HWFET and US06 Simulations for Battery Electric Vehicles (BEVs)</b>		
EPA_1UDDS_1_MPGe	MPGe	Electrical energy used during phase 1 of 1st EPA Urban Dynamometer Drive Schedule expressed as gasoline equivalent MPG (for BEVs)
EPA_1UDDS_2_MPGe	MPGe	Electrical energy used during phase 2 of 1st EPA Urban Dynamometer Drive Schedule expressed as gasoline equivalent MPG (for BEVs)
EPA_2UDDS_1_MPGe	MPGe	Electrical energy used during phase 1 of 2nd EPA Urban Dynamometer Drive Schedule expressed as gasoline equivalent MPG (for BEVs)
EPA_2UDDS_2_MPGe	MPGe	Electrical energy used during phase 2 of 2nd EPA Urban Dynamometer Drive Schedule expressed as gasoline equivalent MPG (for BEVs)
EPA_HWFET_MPGe	MPGe	Electrical energy used during EPA Highway Fuel Economy Test expressed as gasoline equivalent MPG (for BEVs)
EPA_US06_1_MPGe	MPGe	Electrical energy used during phase 1 of the EPA US06 test expressed as gasoline equivalent MPG (for BEVs)
EPA_US06_2_MPGe	MPGe	Electrical energy used during phase 2 of the EPA US06 test expressed as gasoline equivalent MPG (for BEVs)
EPA_1UDDS_1 Electrical Consumption	Wh/mi	electrical energy consumed from propulsion battery during phase 1 of 1st EPA's Urban Dynamometer Driving Schedule (for BEVs)
EPA_1UDDS_2 Electrical Consumption	Wh/mi	electrical energy consumed from propulsion battery during phase 2 of 1st EPA's Urban Dynamometer Driving Schedule (for BEVs)
EPA_2UDDS_1 Electrical Consumption	Wh/mi	electrical energy consumed from propulsion battery during phase 1 of 2nd EPA's Urban Dynamometer Driving Schedule (for BEVs)
EPA_2UDDS_2 Electrical Consumption	Wh/mi	electrical energy consumed from propulsion battery during phase 2 of 2nd EPA's Urban Dynamometer Driving Schedule (for BEVs)
EPA_HWFET Electrical Consumption	Wh/mi	electrical energy consumed from propulsion battery during EPA's Highway Fuel Economy Test (for BEVs)
EPA_US06_1 Electrical Consumption	Wh/mi	electrical energy consumed from propulsion battery during phase 1 of 2nd EPA's US06 test (for BEVs)
EPA_US06_2 Electrical Consumption	Wh/mi	electrical energy consumed from propulsion battery during phase 2 of 2nd EPA's US06 test (for BEVs)
<b>Individual Distance and Time Results for the FTP, HWFET and US06 Simulations</b>		
EPA_FTP_1 distance	miles	distance traveled during phase1 of the EPA Federal Test Procedure

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EPA_FTP_2 distance	miles	distance traveled during phase2 of the EPA Federal Test Procedure
EPA_FTP_3 distance	miles	distance traveled during phase3 of the EPA Federal Test Procedure
EPA_FTP_4 distance	miles	distance traveled during phase4 of the EPA Federal Test Procedure
EPA_HWFET distance	miles	distance traveled during the EPA Highway Fuel Economy Test
EPA_US06_1 distance	miles	distance traveled during phase1 of the EPA US06 test procedure
EPA_US06_2 distance	miles	distance traveled during phase2 of the EPA US06 test procedure
EPA_FTP_1 time	secs	driving time during phase1 of the EPA Federal Test Procedure
EPA_FTP_2 time	secs	driving time during phase2 of the EPA Federal Test Procedure
EPA_FTP_3 time	secs	driving time during phase3 of the EPA Federal Test Procedure
EPA_FTP_4 time	secs	driving time during phase4 of the EPA Federal Test Procedure
EPA_HWFET time	secs	driving time during the EPA Highway Fuel Economy Test
EPA_US06_1 time	secs	driving time during phase1 of the EPA US06 test procedure
EPA_US06_2 time	secs	driving time during phase2 of the EPA US06 test procedure