

Status assessment of M.R.2 in comparison to GTR 15

Term	M.R.2.	GTR 15 Amendment 6
"Powertrain"	means the total combination in a vehicle, of propulsion energy storage system(s), propulsion energy converter(s), the drivetrain(s), providing the mechanical energy at the wheels for the purpose of vehicle propulsion, plus peripheral devices.	Grammatical differences only
"Propulsion energy storage system"	means an energy storage system of the powertrain, whose output energy is used directly or indirectly for the purpose of vehicle propulsion.	means an energy storage system of the powertrain which is not a peripheral device , whose output energy is used directly or indirectly for the purpose of vehicle propulsion.
"Fuel storage system"	means a propulsion energy storage system that stores chemical energy as liquid or gaseous fuel.	
"Rechargeable energy storage system"	means a propulsion energy storage system that stores electrical or mechanical energy and which may be re-energised.	NOT USED
"Rechargeable electrical energy storage system"	means a propulsion energy storage system that stores electrical energy and which is rechargeable.	NOT USED (except in Abbreviations)
"Rechargeable mechanical energy storage system"	means a propulsion energy storage system that stores mechanical energy and which is rechargeable.	NOT USED
"Category of propulsion energy storage system"	means (i) a fuel storage system, or (ii) a rechargeable electric energy storage system, or (iii) a rechargeable mechanical energy storage system.	
"Propulsion energy converter"	means an energy converter of the powertrain, whose output energy is used directly or indirectly for the purpose of vehicle propulsion.	means an energy converter of the powertrain which is not a peripheral device , whose output energy is used directly or indirectly for the purpose of vehicle propulsion.
"Internal combustion engine"	means a propulsion energy converter designed to transform chemical energy (input) into mechanical energy (output) with an internal combustion process;	NOT USED
"Electric machine"	means a propulsion energy converter transforming between electrical and mechanical energy.	
"Electric motor"	means an electric machine transforming electrical energy (input) into mechanical energy (output).	NOT USED
"Electric generator"	means an electric machine transforming mechanical energy (input) into electrical energy (output).	NOT USED

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"Electric motor-generator"	means an electric machine transforming electric energy into mechanical energy and vice versa.	NOT USED
"Fuel cell"	means a propulsion energy converter transforming chemical energy (input) into electrical energy (output) or vice versa.	means an propulsion energy converter transforming chemical energy (input) into electrical energy (output) or vice versa.
"Category of propulsion energy converter"	means (i) an internal combustion engine, or (ii) an electric machine, or (iii) a fuel cell.	
"Drivetrain"	means the connected elements of the powertrain for transmission of the mechanical energy between the propulsion energy converter(s) and the wheels.	
"Peripheral devices"	means energy consuming, converting, storing or supplying devices, where the energy is not primarily used for the purpose of vehicle propulsion, or other parts, systems and control units, which are essential to the operation of the powertrain.	means any energy consuming, converting, storing or supplying devices, where the energy is not directly or indirectly used for the purpose of vehicle propulsion, but which are essential to the operation of the powertrain.
"Energy storage system"	means a system which stores energy and releases it in the same form as was put in.	
"Energy converter"	means a system where the form of energy output is different from the form of energy input.	
"Auxiliary devices"	means energy consuming, converting, storing or supplying devices or systems which are installed in the vehicle for purposes other than the propulsion of the vehicle and are therefore not considered to be part of the powertrain.	means energy consuming, converting, storing or supplying non-peripheral devices or systems which are installed in the vehicle for purposes other than the propulsion of the vehicle and are therefore not considered to be part of the powertrain.
"Internal combustion engine vehicle"	means a vehicle equipped with a powertrain containing exclusively ICE(s) as propulsion energy converter(s).	" Pure ICE vehicle " means a vehicle where all of the propulsion energy converters are internal combustion engines.
"Mono-fuel vehicle"	means a vehicle with an internal combustion engine that operates primarily on one type of fuel.	means a vehicle with an internal combustion engine that operates is designed to run primarily on one type of fuel.
"Bi-fuel vehicle"	means a vehicle with two separate fuel storage systems for different types of fuels and an internal combustion engine that operates primarily on one fuel at a time.	means a vehicle with two separate fuel storage systems that is designed to run primarily on only one fuel at a time; however, the simultaneous use of both fuels is permitted in limited amount and duration.

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"Dual-fuel vehicle"	means a vehicle with two separate storage systems for two different types of fuels and an internal combustion engine that operates primarily on both fuels simultaneously.	NOT USED
"Flex-fuel vehicle"	means a vehicle with one fuel storage system for a mixture of fuels and an internal combustion engine that operates on a mixture or on either of those fuels.	means a vehicle with one fuel storage system that can run on different mixtures of two or more fuels.
"Hybrid vehicle"	means a vehicle equipped with a powertrain containing at least two different categories of propulsion energy converters and at least two different categories of propulsion energy storage systems.	
"Electrified vehicle"	means a vehicle equipped with a powertrain containing at least one electric motor or electric motor-generator as propulsion energy converter.	NOT USED
"Pure electric vehicle"	means a vehicle equipped with a powertrain containing exclusively electric machines as propulsion energy converters and exclusively rechargeable electric energy storage systems as propulsion energy storage systems.	
"Hybrid electric vehicle"	means a hybrid vehicle equipped with a powertrain containing at least one electric motor or electric motor-generator and at least one internal combustion engine as propulsion energy converter.	means a hybrid vehicle where one of the propulsion energy converters is an electric machine.
"Fuel cell vehicle"	means a vehicle equipped with a powertrain containing exclusively fuel cell(s) and electric machine(s) as propulsion energy converter(s).	
"Fuel cell hybrid vehicle"	means a fuel cell vehicle equipped with a powertrain containing at least one fuel storage system and at least one rechargeable electric energy storage system as propulsion energy storage systems.	
"Form of energy"		means (i) electrical energy, or (ii) mechanical energy, or (iii) chemical energy (including fuels).