

## Appendix B. GREET Greenhouse Gas Emissions and Fuel Economy Projections for Various Vehicle Types, 2010

**Table B.1. Passenger Car Emissions and Fuel Economy by Vehicle Type**

Vehicle Type	Fuel Economy		Greenhouse Gas Emissions (grams per mile)				
	Miles per Gallon	Percent Difference from Diesel	Feedstock	Fuel	Vehicle Operation	Total	Percent Difference from Diesel
Diesel	28.2		30	45	330	405	
Diesel with B20	28.2	0	-9	12	331	334	-18
Conventional Gasoline (Corn E10)	23.5	-17	18	74	384	476	18
Flex Fuel with Corn E85	23.5	-17	-178	190	377	389	-4
Flex Fuel with Cellulosic E85	23.5	-17	-221	15	377	171	-58
Hybrid Electric Vehicle (Grid Independent-Corn E10)	34.8	23	12	50	260	322	-20
Hybrid Electric Vehicle (Grid Independent-Corn E85)	34.8	23	-121	128	256	263	-35
Hybrid Electric Vehicle (Grid Independent-Cellulosic E85)	34.8	23	-150	10	256	116	-71
Hybrid Electric Vehicle (Grid Independent Diesel Fuel)	34.8	23	23	34	248	305	-25
Hybrid Electric Vehicle (Grid Independent-B20)	34.8	23	-2	-17	249	230	-43
Plug-In Hybrid Electric Vehicle (US Grid-Corn E10)	41.8	48	16	150	174	340	-16
Plug-In Hybrid Electric Vehicle (US Grid-Corn E85)	41.8	48	-73	203	172	302	-25
Plug-In Hybrid Electric Vehicle (US Grid-Cellulosic E85)	41.8	48	-92	123	172	203	-50
Plug-In Hybrid Electric Vehicle (US Grid-Diesel Fuel)	44.4	57	23	139	166	328	-19
Plug-In Hybrid Electric Vehicle (US Grid-B20)	44.4	57	7	105	167	279	-31
Plug-In Hybrid Electric Vehicle (Northeast Grid-Corn E10)	41.8	48	16	122	174	312	-23
Plug-In Hybrid Electric Vehicle (Northeast Grid-Corn E85)	41.8	48	-73	175	172	274	-32
Plug-In Hybrid Electric Vehicle (Northeast Grid-Cellulosic E85)	41.8	48	-93	96	172	175	-57
Plug-In Hybrid Electric Vehicle (Northeast Grid-Diesel Fuel)	44.4	57	23	112	166	301	-26
Plug-In Hybrid Electric Vehicle (Northeast Grid-B20)	44.4	57	6	78	167	251	-38
Plug-In Hybrid Electric Vehicle (California Grid-Corn E10)	41.8	48	16	99	174	289	-29
Plug-In Hybrid Electric Vehicle (California Grid-Corn E85)	41.8	48	-73	151	172	250	-38
Plug-In Hybrid Electric Vehicle (California Grid-Cellulosic E85)	41.8	48	-93	72	172	151	-63
Plug-In Hybrid Electric Vehicle (California Grid-Diesel Fuel)	44.4	57	23	88	166	277	-32
Plug-In Hybrid Electric Vehicle (California Grid-B20)	44.4	57	6	54	167	227	-44

Source: Results taken from the Argonne National Laboratory's Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) Model, Version 1.8b.