

Mazda Motor Corporation

2019 Pre-Model Year Automotive Fuel Economy Report

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Pre-Model Year Report for Model Year 2019

1. Information for the Passenger Automobiles

1-1. Projected Average Fuel Economy:

	Before Adjust	After Adjust (c=0.0014)	Rounded to 1 decimal place	MFR Projected Reformed CAFE Standard
Import CAFE	38.7226	39.0196	39.0	42.5

1-2. Model type and configuration fuel economy and technical information

1-2-1. By Model Type

1-2-1-1. Combined fuel economy and projected production volume for Import Carlines

Model Type	Combined Fuel Economy	Projected Production Volume	Total Production Volume
MAZDA2 (1.5L) M6	47.1	[72]	[170908]
MAZDA2 (1.5L) S6	48.5	[288]	
MX-5 (Soft Top & RHT) (2.0L) M6 SIL	39.3	[9125]	
MX-5 (Soft Top & RHT) (2.0L) S6	40.3	[5665]	
CX-3 2WD (2.0L) S6	41.9	[5657]	
CX-3 4WD (2.0L) S6	39.6	[12023]	
Mazda3 4-Door 2WD (2.5L w/o Cylinder Deactivation) S6	41.6	[12615]	
Mazda3 4-Door 2WD (2.5L_w/ Cylinder Deactivation) S6	41.0	[14526]	
Mazda3 4-Door 4WD (2.5L_w/Cylinder Deactivation) S6	38.2	[11086]	
Mazda3 5-Door 2WD (2.5L_w/ Cylinder Deactivation) M6 SIL	39.4	[1051]	
Mazda3 5-Door 2WD (2.5L_w/ Cylinder Deactivation) S6	40.1	[5255]	
Mazda3 5-Door 4WD (2.5L_w/ Cylinder Deactivation) S6	37.0	[4204]	
MAZDA6 (2.5L w/o Cylinder Deactivation) M6 SIL	37.0	[393]	
MAZDA6 (2.5L_w/ Cylinder Deactivation) S6	39.8	[13509]	
MAZDA6 (2.5L_T/C) S6	35.3	[8204]	
MAZDA6 (2.2L) S6	41.0	[2456]	
CX-5 2WD (2.5L_w/ Cylinder Deactivation) S6	37.1	[58301]	
CX-5 2WD (2.5L_T/C) S6	33.3	[810]	
CX-5 2WD (2.2L) S6	41.2	[5668]	

1-2-1-2. Application of air conditioning, off-cycle efficiency improvement technology for Import Carlines

Not applicable.

information bracketed []

1-2-2-1. By Vehicle Configuration for Import Carlines

NO. CFG	VEHICLE CONFIGURATION	SALES AREA	WC	LVW	ETW	SP (L)	CYL	SAE NET KW	SAE NET HP	ENGINE CODE	FUEL SYS	EMS CTL SYS	T R N	G R S	O D	NV	AXLE	COMB FE	PROJ PROD VOL	INT VOL (ft³)	BODY STYLE (#2)	ROAD LOAD HP	TIRE SIZE	BASE TIRE	TRACK WIDTH	TRACK WIDTH	TRACK WIDTH	WHEEL BASE	FOOT PRINT	FRNT AREA	OPTION#(1)		
																									Front (in)	Rear (in)	(in)	(in)	(ft²)	A	A	P	
20	MAZDA6 W/S/L	50S	3500	3660	3625	2.5	4	139	187	8PYU3FAA	DFI	(*1)	M	6	Y	36.1	4.105	37.0	393	114.6	SDN	11.1	P225/55 R17	x	62.4	62.0	62.2	111.4	48.1	24.6	Y	Y	Y
																			±1.0						±1.0	±1.0	±1.0	±1.2	Y	Y	Y		
21	MAZDA6	50S	3500	3733	3750	2.5	4	139	187	8PYUDSFAA	DFI	(*1)	S	6	Y	29.5	3.812	39.7	3193	114.6	SDN	11.2	P225/55 R17	x	62.4	62.0	62.2	111.4	48.1	24.6	Y	Y	Y
																			±1.0						±1.0	±1.0	±1.0	±1.2	Y	Y	Y		
22	MAZDA6	50S	4000	3880	3875	2.5	4	169	227	8PYTSFAA	DFI	(*3)	S	6	Y	31.7	4.090	35.6	0	114.6	SDN	11.8	P225/55 R17	x	62.4	62.0	62.2	111.4	48.1	24.6	Y	Y	Y
																			±1.0						±1.0	±1.0	±1.0	±1.2	Y	Y	Y		
23	MAZDA6	50S	4000	4148	4250	2.2	4	125	168	9SHGFAA	DFI	(*2)	S	6	Y	31.5	4.090	41.0	2456	114.6	SDN	13.2	P225/45 R19		62.8	62.4	62.6	111.4	48.4	24.6	Y	Y	Y
																			±1.0						±1.0	±1.0	±1.0	±1.2	Y	Y	Y		
24	CX-5 2WD	50S	4000	3841	3875	2.5	4	139	187	8PYUDSAAA	DFI	(*1)	S	6	Y	31.5	4.325	37.1	36438	134.5	5WGN	13.4	P225/65 R17	x	62.8	62.8	62.8	106.2	46.3	28.0	Y	Y	Y
																			±1.0						±1.0	±1.0	±1.0	±1.2	Y	Y	Y		
25	CX-5 2WD	50S	4000	3688	4000	2.5	4	169	227	9PYTSLAA	DFI	(*3)	S	6	Y	31.8	4.411	33.3	810	134.5	5WGN	13.8	P225/55 R19	x	62.8	62.8	62.8	106.2	46.3	28.0	Y	Y	Y
																			±1.0						±1.0	±1.0	±1.0	±1.2	Y	Y	Y		
26	CX-5 2WD	50S	4000	4101	4000	2.2	4	125	168	8SHSAAA	DFI	(*2)	S	6	Y	31.8	4.411	41.2	5668	134.5	5WGN	13.8	P225/55 R19	x	62.8	62.8	62.8	106.2	46.3	28.0	Y	Y	Y
																			±1.0						±1.0	±1.0	±1.0	±1.2	Y	Y	Y		

(#1) AC Air Contoning, ABS Anti-lock Brake System, PS Power Steering
(#2) ST Soft top, RHT Retractable Hard Top

(*1)TWC/WU-TWC/HO2S/WR-HO2S/DFI
(*2)WU-OC+NAC/NH3OC/SCRC/DPF/CAC/TC/DFIEGRC/WR-HO2S/NOXS/PMS/EGR/RDQS
(*3)TWC/WU-TWC/HO2S/WR-HO2S/DFI/CAC/TC/EGR/EGR

2. Information for the Non-passenger Automobiles

2-1. Projected Average Fuel Economy

	Rounded to 4 decimal place	Rounded to 1 decimal place	MFR Projected Reformed CAFE Standard
Truck CAFE	33.8555	33.9	33.7

2-2. Model type and configuration fuel economy and technical information:

2-2-1. By Model Type

2-2-1-1. Combined fuel economy and projected production volume

Model Type	Combined Fuel Economy	Projected Production Volume	Total Production Volume
CX-5 4WD (2.5L_w/ Cylinder Deactivation) S6	35.2	[68503]	[121967]
CX-5 4WD (2.5L_T/C) S6	31.7	[18138]	
CX-5 4WD (2.2L) S6	38.9	[10526]	
CX-9 2WD (2.5L_T/C) S6	32.1	[9176]	
CX-9 4WD (2.5L_T/C) S6	29.6	[15624]	

2-2-1-2. Application of air conditioning, off-cycle efficiency improvement technology, full-size pick-up trucks

Not applicable.

2-2-2. By Vehicle Configuration

NO. CFG	VEHICLE CONFIGURATION	SALES AREA	IWC	LVW	ETW	SP (L)	CYL	SAE NET KW	SAE NET HP	ENGINE CODE	FUEL SYS	EMS CTL SYS	T R N	G R S	O D	N/V	AXLE	COMB FE	PROJ PROD VOL	PASS CARRYING VOL (R3)	CARGO CARRYING VOL (R3)	ROAD LOAD HP	TIRE SIZE	BASE TIRE	TRACK WIDTH Front (in)	TRACK WIDTH Rear (in)	TRACK WIDTH (in)	WHEEL BASE (in)	FOOT PRINT (ft ²)	FRNT AREA (ft ²)	OPTION(#1)		
																															A C	A B S	P S
1	CX-5 4WD	50S	4000	3979	4000	2.5	4	139	187	8PYUDGAAA	DFI	(*1)	S	8	Y	33.7	4.824	35.2	36438	103.6	30.9	14.2	P225/65 R17	x	62.8 ±1.0	62.8 ±1.0	62.8 ±1.0	108.2 ±1.0	46.3 ±1.2	28.0	Y	Y	Y
																33.3	4.824	35.1	32065	103.6	30.9	14.1	P225/65 R19		62.8 ±1.0	62.8 ±1.0	62.8 ±1.0	108.2 ±1.0	46.3 ±1.2	28.0	Y	Y	Y
2	CX-5 4WD	50S	4000	4125	4250	2.5 T/C	4	169	227	9PYTGLAA	DFI	(*3)	S	8	Y	31.5	4.411	31.7	18138	103.6	30.9	14.7	P225/65 R19	x	62.8 ±1.0	62.8 ±1.0	62.8 ±1.0	108.2 ±1.0	46.3 ±1.2	28.0	Y	Y	Y
3	CX-5 4WD	50S	4000	4240	4250	2.2	4	125	168	8SHGAAA	DFI	(*2)	S	8	Y	31.8	4.411	38.9	10526	103.6	30.9	14.7	P225/65 R19	x	62.8 ±1.0	62.8 ±1.0	62.8 ±1.0	108.2 ±1.0	46.3 ±1.2	28.0	Y	Y	Y
4	CX-9 2WD	50S	4500	4517	4500	2.5 T/C	4	169	227	7PYTSAAA	DFI	(*3)	S	8	Y	30.5	4.411	32.7	868	134.9	14.3	14.6	P255/60 R18	x	65.3 ±1.0	65.2 ±1.0	65.2 ±1.0	115.3 ±1.0	52.2 ±1.2	30.4	Y	Y	Y
																30.5	4.411	32.1	8308	134.9	14.3	15.5	P255/60 R20		65.3 ±1.0	65.2 ±1.0	65.2 ±1.0	115.3 ±1.0	52.2 ±1.2	30.4	Y	Y	Y
5	CX-9 4WD	50S	4500	4683	4750	2.5 T/C	4	169	227	7PYTGAAA	DFI	(*3)	S	8	Y	30.5	4.411	30.2	620	134.9	14.3	15.7	P255/60 R18	x	65.3 ±1.0	65.2 ±1.0	65.2 ±1.0	115.3 ±1.0	52.2 ±1.2	30.4	Y	Y	Y
																30.5	4.411	29.6	16004	134.9	14.3	16.2	P255/60 R20		65.3 ±1.0	65.2 ±1.0	65.2 ±1.0	115.3 ±1.0	52.2 ±1.2	30.4	Y	Y	Y

(#1) AC: Air Contoning, ABS: Anti-lock Brake System, PS: Power Steering

(*1) TWC/WU-TWC/HQ2S/WR-HQ2S/DF1

(*2) WU-OC+MAC/NI30C/SCRG/DFE/CAC/TC/DF1/EGRC/WR-HQ2S/NOXS/PMS/EGR/RODS

(*3) TWC/WU-TWC/HQ2S/WR-HQ2S/DF1/CAC/TC/EGR/EGRC

3. Light Truck Vehicle Information by Vehicle Configuration

NO. CFG	VEHICLE CONFIGURATION	TRANSPORT MORE THAN 10 PERSONS	PROVIDE TEMPORARY LIVING QUARTERS	TRANSPORT PROPERTY ON AN OPEN BED	GRATER CARGO-CARRYING THAN PASSENGER-CARRYING VOLUME	PERMIT EXPANDED USE OF THE AUTOMOBILE FOR CARGO-CARRYING PURPOSES OR OTHER NON-PASSENGER-CARRYING PURPOSES	EXISTENCE OF 4-WHEEL DRIVE (YES/NO)	6000 < GVWR (lb)	APPROACH ANGLE (deg)	BREAKOVER ANGLE (deg)	DEPARTURE ANGLE (deg)	MIN. RUNNING CLEARANCE (cm)	AXLE CLEARANCE (cm)	
													Front	Rear
1	CX-5 2.5L S6 4x4	NO	NO	NO	NO	NO	YES	NO	17.0	15.4	22.5	20.9	23.4	24.8
2	CX-5 2.5L T/C S6 4x4	NO	NO	NO	NO	NO	YES	NO	17.0	15.4	22.5	20.9	23.4	24.8
3	CX-5 2.2L S6 4x4	NO	NO	NO	NO	NO	YES	NO	17.0	15.4	22.5	20.9	23.2	24.8
4	CX-9 2.5L S6 4x2	NO	NO	NO	NO	YES	NO	NO	17.5	18.0	20.5	20.4	25.0	---
5	CX-9 2.5L S6 4x4	NO	NO	NO	NO	YES	YES	NO	17.5	18.0	20.5	20.4	25.0	25.3

Fuel Economy Methodology Used in Projecting CAFE Values

Derived Fuel Economy Values

As provided for by 49 CFR §537.9 (a) (3), Mazda has used data substitutions where no EPA-approved or Mazda test results exist at the appropriate sub-configuration level for minimum test requirements. These values were derived from a base configuration (ETW), axle ratio, road load horsepower, etc., and engineering judgment.

Addendum to the Report

The information contained in this report is, to the best of Mazda's knowledge, accurate and complete. This report is filed subject to the following provisions:

Based on currently available information, we believe that the projected average fuel economy set forth in this report sufficiently represents Mazda Motor Corporation's average fuel economy for the 2019 model year. If changes in consumer demand or other unforeseen events cause a significant shift in Mazda's production/sales mix, Mazda reserves the right to adjust its projections accordingly.

Passenger Car and Light Truck CAFE Credits/Debits Summary

Mazda CAFE Credit/Debit Summary

Passenger Car (Import)

MY	CAFE Value	CAFE Std	Production Volume	MY Credit Credits Excess or (Shortfall)	Intended Action	MY Credit Balance Excess or (Shortfall)
2009	32.6	27.5	54,862	2,797,962	---	2,797,962
2010	33.8	27.5	212,495	13,387,185	---	13,387,185
2011	33.8	30.7	181,202	5,617,262	---	5,617,262
2012	37.9	33.9	213,308	8,532,320	1,210,000 credits were transferred to Ford.	7,322,320
2013	39.4	34.8	164,862	7,583,652	2,803,892 credits are used to offset 2018MY debits	4,779,760
2014	41.5	34.4	217,333	15,430,643	5,981,780 credits are used to offset 2019MY debits	9,448,863
2015	41.9	35.5	207,100	13,254,400	13,387,185 credits from 2010MY is expired by the end of 2015MY	13,254,400
2016	42.1	37.3	305,635	14,670,480	5,617,262 credits from 2011MY is expired by the end of 2016MY	14,670,480
2017	40.4	39.4	182,534	1,825,340	7,322,320 credits from 2012MY is expired by the end of 2017MY	1,825,340
2018 (2018MY Mid CAFE Report Projected Values)	37.9	40.5	107,842	-2,803,892	2018MY debits are offset by 2013MY credits and the remaining 2013MY credits (7,583,652-2,803,892) are expired by the end of 2018MY	0
2019 (2019MY Pre CAFE Report Projected Values)	39.0	42.5	170,908	-5,981,780	2019MY debits are offset by 2014MY credits and the remaining 2014MY credits (15,430,643-5,981,780) are expired by the end of 2019MY	0

Projected Total Credits at the end of 2019MY **29,750,220**

Passenger Car (Domestic)

MY	CAFE Value	CAFE Std	Production Volume	MY Credit Credits Excess or (Shortfall)	Intended Action	MY Credit Balance Excess or (Shortfall)
2009	30.4	27.5	39,504	1,145,616	---	1,145,616
2010	n/a	n/a	0	0	---	0
2011	31.8	31.1	2,218	15,526	---	15,526
2012	n/a	n/a	0	0	---	0
2013	n/a	n/a	0	0	---	0
2014	n/a	n/a	0	0	1,145,616 credits from 2009MY is expired by the end of 2014MY	0
2015	n/a	n/a	0	0	---	0
2016	n/a	n/a	0	0	15,526 credits from 2011MY is expired by the end of 2016MY	0
2017	n/a	n/a	0	0	---	0
2018 (2018MY Mid CAFE Report Projected Values)	41.8	41.2	103,894	623,364	---	623,364
2019 (2019MY Pre CAFE Report Projected Values)	n/a	n/a	0	0	---	0

Projected Total Credits at the end of 2019MY **623,364**

Truck

MY	CAFE Value	CAFE Std	Production Volume	MY Credit Credits Excess or (Shortfall)	Intended Action	MY Credit Balance Excess or (Shortfall)
2009	26.6	23.1	54,508	1,907,780	---	1,604,552
2010	26.7	23.5	98,444	3,150,208	---	3,150,208
2011	24.7	25.6	33,692	-303,228	2011MY debits are offset by 2009MY credits.	0
2012	27.8	27.2	65,696	394,176	394,176 credits were transferred to Jaguar Land Rover.	0
2013	30.4	28.1	61,093	1,405,139	---	1,405,139
2014	31.4	28.9	78,826	1,970,650	1,604,552 credits from 2009MY is expired by the end of 2014MY	1,970,650
2015	31.6	30.0	78,793	1,260,688	3,150,208 credits from 2010MY is expired by the end of 2015MY	1,260,688
2016	34.2	31.4	153,192	4,289,376	---	4,289,376
2017	33.7	32.3	74,414	1,041,796	---	1,041,796
2018 (2018MY Mid CAFE Report Projected Values)	33.8	32.8	112,906	1,129,060	1,405,139 credits from 2013MY is expired by the end of 2018MY	1,129,060
2019 (2019MY Pre CAFE Report Projected Values)	33.9	33.7	121,987	243,934	1,970,650 credits from 2014MY is expired by the end of 2019MY	243,934

Projected Total Credits at the end of 2019MY **7,964,854**