Toyota bZ4X

150 KW ELECTRIC FWD AUTOMATIC

2024 ★★★★★ 97%

10.0 /10	9.4 /10	9.7 /10
Clean Air Index	**Energy Efficiency Index**	**Greenhouse Gas Index**

10.0 /10 Clean Air Tests

	Laboratory Test	NMHC	NO_x	NH_3	CO	PN
10.0/10	Cold Test	●	●	●	●	●
10.0/10	Warm Test	●	●	●	●	●
10.0/10	Highway	●	●	●	●	●
10.0/10	Cold Ambient Test	●	●	●	●	●
	Road Test					
10.0/10	On-Road Drive	●	●	●	●	●
5.0/5	On-Road Short Trip	●	●	●	●	●
8.0/8	On-Road Heavy Load	●	●	●	●	●
5.0/5	On-Road Light Load	●	●	●	●	●
2.0/2	Congestion	●	●	●	●	●

● n.a. ● good ● adequate ● marginal ● weak ● poor

Comments

With no tailpipe emissions, the electric Toyota bZ4X naturally scores the full 10 points in the Clean Air part of the assessment.

9.4 /10 Energy Efficiency Tests

	Laboratory Test	Energy		
10.0/10	Cold Test		→	17.3 kWh/100 km
10.0/10	Warm Test		→	16.9 kWh/100 km
9.1/10	Highway		→	26.1 kWh/100 km
8.7/10	Cold Ambient Test		→	29.1 kWh/100 km

	Consumption	Driving Range
Average	20.1 kWh/100 km	362 km
Worst-case	29.1 kWh/100 km	240 km

n.a. good adequate marginal weak poor

Comments

The Toyota bZ4X demonstrates low consumption in the Cold and Warm Laboratory Tests – ca. 17 kWh/100 km from the grid. In the Highway cycle, the electric SUV uses significantly more – 26.1 kWh/100 km, corresponding to a range of 268 km. The On-Road Drive was performed on a dry road at around 19°C and the Toyota needed slightly less than 17 kWh/100 km, giving it a range of around 419 km. In the -7°C Cold Ambient Test, the mid-sized SUV shows an energy demand of 29.1 kWh/100 km from grid, meaning a worst case of 240 km driving range, if the trip were repeated until the battery was depleted.

9.7 /10 Greenhouse Gases Tests

	Greenhouse gases	CO_2	N_2O	CH_4
10.0/10	Cold Test			
10.0/10	Warm Test			
9.6/10	Highway			
9.2/10	Cold Ambient Test			

n.a. good adequate marginal weak poor

Comments

This Index is based on a Well-to-Wheel+ approach, meaning that the GHG emissions related to the supply of the energy are added to those of the tailpipe. The vehicle's production is not yet included in the assessment due to the implicit limitations of generic data about global supply chains, but its estimated value can be found in Green NCAP's LCA results. As the bZ4X is purely electric, its GHG emissions originate only from electricity supply – ca. 48-82 g CO_2-eq./km, depending on the test consumption.

Our Verdict

The new Toyota bZ4X is the Japanese manufacturer's first full electric vehicle. It is a mid-sized SUV with a maximum power of 150 kW and an officially declared usable battery capacity of 64 kWh. Tested here is the high-end trim version with an empty vehicle mass of 1,967 kg. In Green NCAP's testing, Toyota had to show whether all their experience with hybrid-electric vehicles pays off with BEVs. The measured test consumption values are creditable and the vehicle shows good comfort for the passengers in cold and warm environment in its default driving mode. Heating is provided by a high voltage heater and a heat pump. For the battery capacity test the vehicle was charged with 11 kW charging power. 63.3 kWh were measured as the usable battery capacity, which corresponds well to the advertised figure. The full battery recharge takes 70.0 kWh from the electricity grid, which results in a good grid-to-battery output efficiency of 90.4%, a value slightly above the average of Green NCAP's tested EV fleet. Overall, the Toyota bZ4X finishes with an Average Score of 97%, easily collects all 5 Green Stars and proves that Toyota can also build energy efficient EVs.

Disclaimer

Specification

Tested Car
JTMAABAA70A02xxxx

Publication Date	Vehicle Class	Tyres	Emissions Class
09 2024	Small SUV	235/50R20 104V	AX

Mass	Engine Size	System Power/Torque	Declared CO_2
1,967 kg	n.a.	150 kW/265 Nm	n.a.

Declared Battery Capacity	Declared Driving Range	Declared Consumption
64.0 kWh	Overall 443 km City 591 km	16.7 kWh/100 km

Heating Concept
HVH & Heat pump

Think before you print