

# XPENG G9

E1L ELECTRIC RWD AUTOMATIC

2023



95%



10.0   
/10

**Clean Air  
Index**

9.2   
/10

**Energy Efficiency  
Index**

9.4   
/10

**Greenhouse Gas  
Index**

10.0  
/10



# Clean Air Tests



## Laboratory Test

NMHC

NO<sub>x</sub>

NH<sub>3</sub>

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 XPENG G9 naturally scores the full 10 points in the Clean Air part of the assessment.

# Energy Efficiency Tests



## Laboratory Test

### Energy

10.0/10	Cold Test		→	19.3 kWh/100 km
10.0/10	Warm Test		→	19.2 kWh/100 km
8.7/10	Highway		→	29.1 kWh/100 km
8.2/10	Cold Ambient Test		→	32.4 kWh/100 km

### Consumption

### Driving Range

Average	22.5 kWh/100 km	522 km
Worst-case	32.4 kWh/100 km	350 km



n.a.



good



adequate



marginal



weak



poor

## Comments

The G9 is a big and heavy SUV yet it manages to keep its consumption around 19 kWh/100 km in the standard WLTC+ Lab Tests. In the Highway cycle, the aerodynamic drag of the large SUV body contributes to increasing the value to 29.1 kWh/100 km, corresponding to a range of 388 km. The On-Road Drive was performed at around 17°C and the car needed about 19 kWh/100 km, leading to a range of around 594 km. At -7°C in the Cold Ambient Test, the big XPENG showed a demand of 32.4 kWh/100 km, with the increase attributed mainly to energy needed to provide thermal comfort very quickly to the driver.

# 9.4

/10

## Greenhouse Gases Tests



### Greenhouse gases

CO<sub>2</sub>

N<sub>2</sub>O

CH<sub>4</sub>

10.0/10 Cold Test



10.0/10 Warm Test



9.2/10 Highway



8.6/10 Cold Ambient Test



n.a.



good



adequate



marginal



weak



poor

### Comments

This Index is based on a Well-to-Wheel+ approach, meaning that the Greenhouse Gas emissions related to the supply of the energy are added to those of the tailpipe. As the G9 is purely electric, its GHG emissions originate only from the processes of electricity supply – from ca. 54 g CO<sub>2</sub>-eq./km for the amount of electricity needed in the WLTC+ Laboratory Tests up to 91 g CO<sub>2</sub>-eq./km in the Cold Ambient Test. Thanks to its electric powertrain and the relatively low CO<sub>2</sub> emissions of the EU electricity mix, the car scores a 9.4 out of 10.

## Our Verdict

The G9 represents the first XPENG vehicle tested by Green NCAP. The car is a large and luxurious SUV, with a battery of 98 kWh declared usable capacity, which helps it reach long driving ranges, addressing some consumers' range anxiety. This, however, comes at a cost of 2,210 kg empty mass. Nevertheless, the G9 makes excellent use of its electric powertrain and delivers low electricity consumption values. Both standard laboratory tests, with warm and cold powertrain start, score full points in the Energy Efficiency Index with recorded energy demand values of ca. 19 kWh/100 km. As expected, the Highway consumption is significantly increased mainly due to the SUV frontal surface, but the value of 29 kWh/100 km is still creditable. Interesting for consumers is the expected driving range in real world – 594 km (recorded at around 17°C and sunny weather on dry road). The highest consumption of 32.4 kWh/100 km Green NCAP measured in the Cold Ambient Test at -7°C, but a large share of the energy is used for heating. The smart heating system used significant power to provide a comfortable temperature level very quickly to the driver, using both a PTC heater and a heat pump. During the battery capacity test, the vehicle is charged with 11 kW. Here, a usable battery capacity of 100 kWh was obtained – slightly higher than the officially declared value. To charge the car starting with a fully depleted condition, 113 kWh had to be delivered by the electricity grid, which results in a good but fairly typical grid-to-battery-output efficiency of 88.4 %. Overall, the XPENG G9 reaches an average score of 95% and easily receives 5 Green stars.

## Disclaimer [↗](#)

## Specification

### Tested Car

L1NNSGHB1PB00xxxx

<b>Publication Date</b> 12 2023	<b>Vehicle Class</b> Large SUV	<b>Tyres</b> 255/55 R19	<b>Emissions Class</b> Euro 6 AX
<b>Mass</b> 2,210 kg	<b>Engine Size</b> n.a.	<b>System Power/Torque</b> 230 kW/430 Nm	<b>Declared CO<sub>2</sub></b> n.a.
<b>Declared Battery Capacity</b> 98.0 kWh	<b>Declared Driving Range</b> Overall 570 km City 787 km	<b>Declared Consumption</b> 19.4 kWh/100 km	
<b>Heating Concept</b> Waste heat & PTC & Heat pump			



Think before you print