

Mercedes-Benz GLA

250E PLUG-IN HYBRID FWD AUTOMATIC



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Clean Air Tests



Laboratory Test

NMHC

NO_x

NH₃

CO

PN

8.5/10 Cold Test



8.8/10 Warm Test



8.2/10 Highway



6.6/10 Cold Ambient Test



Road Test

8.1/10 On-Road Drive



3.9/5 On-Road Short Trip



6.3/8 On-Road Heavy Load



4.3/5 On-Road Light Load



2.0/2 Congestion



n.a.



good



adequate



marginal



weak



poor

Comments

The GLA 250e PHEV demonstrates well-designed, state-of-the-art exhaust emissions control. The emissions of ammonia (NH₃), which are not subject to regulation, are generally low and the particle emissions are robustly minimised in all the test scenarios. NO_x and hydrocarbon emissions are barely existent. The good performance is maintained on the road as well, where the tests in combustion mode and those performed with a fully charged battery both score well. The combination of the results in both modes gives a creditable Clean Air score.

Energy Efficiency Tests



Laboratory Test

Energy

5.8 /10 Cold Test



4.2 /10 Warm Test



0.8 /10 Highway



1.6 /10 Cold Ambient Test



Consumption

Driving Range

	petrol	electric		petrol	electric	
Average	5.3 l	8.3 kWh	/100 km	452	53	km
Worst-case	9.7 l	0.0 kWh	/100 km	359	0	km

Consumption in WLTC+ Battery Depleting Cycle: 1.7 l/100 km fuel + 19.4 kWh/100 km electricity



n.a.



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adequate



marginal



weak



poor














Comments

When tested with an empty battery, the GLA 250e performs like a normal hybrid and is challenged by the relatively high mass and SUV body aerodynamics. The vehicle needs about 7 l/100 km in the standard lab tests, whereas in the -7°C and in the Highway Test, the figures increase to 9.1 and 9.7 l/100 km, respectively. The mixed On-Road Drive needed 6.4 l/100 km. The following results are obtained when starting with a fully charged battery: On-Road Drive – 2.7 l/100 km and 15.7 kWh/100 km electric demand; Light Load Trip – 1.3 l/100 km and 15.8 kWh/100 km; Heavy Load – 7.1 l/100 km and 2.9 kWh/100 km.

4.1

/10

Greenhouse Gases Tests

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
4.8/10	Cold Test			
2.5/10	Warm Test			
0.0/10	Highway			
0.0/10	Cold Ambient Test			



n.a.



good



adequate



marginal



weak



poor

Comments

When operated in combustion mode, the Greenhouse Gas Index results would benefit from a further reduction of fuel consumption, especially in high-load and cold start conditions. However, thanks to the relatively low greenhouse gas intensity of European electricity supply, the operation in the more energy efficient electric mode allows the GLA 250e to increase its score. The standard WLTC+ Cold Test in combustion mode results in a total (tailpipe + upstream) of 202 g CO₂-eq./km, while the average value of the charge depleting WLTC+ sequence is just half of it – 102 g CO₂-eq./km.

Our Verdict

Here, Green NCAP tested the 2024 model of the Mercedes-Benz GLA 250e PHEV. The plug-in hybrid system is equipped with a 120 kW petrol engine and a 80 kW electric motor, the combined 160 kW power being transmitted through an 8-gear automatic transmission. This GLA is a compact SUV targeting an audience looking for high everyday comfort, luxury and functionality. With 11.7 kWh fully charged into the battery, Green NCAP measured a pure electric range of 51 km in the standard mixed On-Road Drive and almost 67 km in the Light Load On-Road test. With such a driving range, most everyday trips can be covered in electric mode. In the dynamic Heavy Load Test with sport vehicle settings, the target of the electric system is to support the combustion machine with quick power rather than to provide electric range.

The car scored well for Clean Air and proved that it can control its pollutants under various conditions. The fuel consumption in combustion mode is not low but as expected for this type of vehicle, and can be compensated by the good efficiency of the electric driving mode. Green NCAP's PHEV test score is a combination of weighted results in electric and combustion mode, with the discriminator being the equivalent all electric range (EAER) as measured by the programme (Green NCAP's test deviates from the type approval test due to testing with active air-conditioning). The EAER value of 53.5 km results in electric mode contribution of 43%, whereas the combustion mode accounts for 57% of the score. A bigger high-voltage battery and/

Disclaimer [↗](#)

Specification

Tested Car

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Publication Date 12 2024	Vehicle Class Small SUV	Tyres 235/50 R19	Emissions Class Euro 6 EA
Mass 1,809 kg	Engine Size 1,332 cc	System Power/Torque 160 kW/450 Nm	Declared CO₂ 30 g/km
Declared Battery Capacity 11.5 kWh	Declared Driving Range Overall Electric (WLTP) 64 km City 69 km	Declared Consumption 1.3 l/100 km 20.1 kWh/100 km	

Heating Concept

Waste heat & PTC



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