



2023

Hyundai STARIA

2.2 CRDi diesel AWD automatic



5.3 
/10

Clean Air
Index

0.5 
/10

Energy Efficiency
Index

0.0 
/10

Greenhouse Gas
Index



Laboratory Test

NMHC

NO_x

NH₃

CO

PN

5.1/10 Cold Test



7.9/10 Warm Test



0.0/10 Highway



Cold Ambient Test

Does not qualify for additional robustness testing



Road Test

7.9/10 On-Road Drive



2.9/5 On-Road Short Trip



On-Road Heavy Load

Does not qualify for additional robustness testing

On-Road Light Load

Does not qualify for additional robustness testing

Congestion

Does not qualify for additional robustness testing



n.a.



good



adequate



marginal



weak



poor

Comments

The Hyundai STARIA scores well in the Warm start lab test, but a cold engine start increases the particle output and NO_x emissions. The challenging BAB130 Highway Test reveals a weakness of the exhaust aftertreatment with 150 g/km NO_x emissions being emitted – far above the upper threshold of 60 mg/km. In this case, the emissions behaviour loses robustness despite the LNT and SCR catalysts. The On-Road drive confirms the results of the WLTC+ Lab Tests and lets the car demonstrate good Clean Air performance, as long as the test requirements remain moderate.

Energy Efficiency Tests



Laboratory Test

Energy

0.5/10 Cold Test



1.3/10 Warm Test



0.0/10 Highway



Cold Ambient Test

Does not qualify for additional robustness testing

Consumption

Driving Range

Average

9.4 l/100 km

811 km

Worst-case

11.1 l/100 km

678 km



n.a.



good



adequate



marginal



weak



poor

Comments

The STARIA is a large van of 2,400 kg kerb weight, and naturally use a lot of energy to move. It scores only 0.5 points out of 10 in this part of the assessment. The lowest consumption of 8.1 l/100 km is recorded in the On-Road Drive and the worst 11 l/100 km – in the Highway Test. With 8.9 and 8.2 l/100 km, the figures in the Cold and Warm Lab Tests are also high, but not surprising for this kind of vehicle.



Greenhouse gases

CO₂

N₂O

CH₄

0.0/10 Cold Test



0.0/10 Warm Test



0.0/10 Highway



Cold Ambient Test

Does not qualify for additional robustness testing



n.a.



good



adequate



marginal



weak



poor

Comments

Due to the high consumption values, the STARIA cannot be rewarded any points in this part of the assessment. Following the Well-to-Wheel+ approach, in the Cold lab test, 43 g CO₂-eq./km for the diesel supply are added to the 232 g/km CO₂ at the tailpipe.

Additionally, the CO₂-equivalent values of the CH₄ and N₂O emissions must be considered.

The result is 286 g CO₂-eq./km - significantly above the 225 g CO₂-eq./km threshold set by Green NCAP. Furthermore, the STARIA fails to control CH₄ and N₂O efficiently and loses half of the possible bonus points.

Our Verdict

The Hyundai STARIA is large 7-seat van with a 2.2 litre Diesel engine and a technically permissible maximum laden mass of 3,030 kg. The utility value of the vehicle should be acknowledged when analysing the fuel consumption figures, but in Green NCAP's neutral approach the car can't score in terms of sustainability. The heavy van needs 8.9 l/100 km in the Cold lab test and 11 l/100 km in the Highway Test. While the reasons for the poor results in the Energy Efficiency and Greenhouse Gas Indexes are obvious, the STARIA's exhaust aftertreatment behaviour also fails to impress. It scores zero points in the Highway Test due to exceedance of the NO_x threshold, which limits the overall Clean Air result to 5.3/10. an Average Score of 96% the Hyundai STARIA receives 1 Green star and closely misses one more half of a star.

Disclaimer

Specifications

Publication Date 04 2023	Tested Car KMHYF811DNU05xxxx	Tyres 235/55R18	Emissions Class Euro 6d AP
Mass 2,401 kg	Engine Size 2,199 cc	Power/Torque 130 kW/430 Nm	Declared CO ₂ 232 g/km
Declared Battery Capacity n.a.	Declared Driving Range n.a.	Declared Consumption 8.9l/100 km	
Heating Concept Waste heat			



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