



2022

Hyundai TUCSON

HEV 1.6 T-GDI hybrid FWD automatic



4.2 
/10

Clean Air
Index

4.5 
/10

Energy Efficiency
Index

3.1 
/10

Greenhouse Gas
Index



Laboratory Test

NMHC

NO_x

NH₃

CO

PN

5.6/10 Cold Test



6.2/10 Warm Test



0.0/10 Highway



Cold Ambient Test

Does not qualify for additional robustness testing



Road Test

6.2/10 On-Road Drive



1.0/5 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 car's control of pollutant emissions does not impress. In the WLTC+ lab tests, the particles and NH₃ (ammonia) emissions come close to or exceed Green NCAP's upper thresholds. On the positive side, the standard species NMHC (unburnt hydro-carbons), NO_x and CO are very low. The Highway Test, with its high power demand phases, constitutes a real challenge for the exhaust aftertreatment. Here, the car emits more than 10 times the upper threshold of NH₃, high numbers of particles and skyrocketing CO emissions. Short urban trips are also not the vehicle's strength.

Energy Efficiency Tests



Laboratory Test

Energy

5.9/10 Cold Test



6.0/10 Warm Test



1.6/10 Highway



Cold Ambient Test

Does not qualify for additional robustness testing

Consumption

Driving Range

Average

6.8 l/100 km

811 km

Worst-case

9.1 l/100 km

570 km



n.a.



good



adequate



marginal



weak



poor

Comments

The hybrid system of the Hyundai Tucson seems well designed and manages very well in keeping the consumption values down to 5-6l/100 km of petrol in the WLTC+ laboratory tests and in "normal" real world driving. Given the relatively high mass and the vehicle's body shape, these results are creditable. In the Highway Test, however, the hybrid system can't play to its advantages and the high aerodynamic drag takes over, leading to a jump of the consumption figure to 9.1l/100 km - a behaviour typical for SUVs. Consequently, the Tucson's score for energy efficiency is below average.

3.1 Greenhouse Gases Tests

/10



Greenhouse gases

CO₂

N₂O

CH₄

4.7/10 Cold Test



4.8/10 Warm Test



0.0/10 Highway



Cold Ambient Test

Does not qualify for additional robustness testing



n.a.



good



adequate



marginal



weak



poor

Comments

The Tucson's greenhouse gas emissions are enough for about half the points in the WLTC+ laboratory tests but set the Highway Test result to zero due to the CO₂ output resulting from the high fuel consumption in that test. Here, the CO₂ emissions at the tailpipe are 200g/km and additional upstream 54 gCO₂-eq. associated with the supply of the fuel are added to the number. This reflects Green NCAP's Well-to-Wheel+ approach for the Greenhouse Gas Index. On the plus side, the car is granted bonus points for its good management of N₂O and CH₄ in all tests.

Our Verdict

The Hyundai Tucson is a relatively heavy and high-powered SUV that is equipped with a full hybrid system, a turbocharger and a GPF. It scores below average in the Clean Air Index due to poor particle control, high output of the unregulated pollutant ammonia and excessive CO emissions in high power demand highway phases. The hybrid system works effectively in situations representing “normal” real world driving and is expected to offer consumers good consumption figures in rural driving scenarios with moderate speeds. However, short urban trips and, especially, dynamic highway driving will increase the values to the measured values of 8 and 9l/100 km, respectively. The greenhouse gas emissions are closely related to the consumption figures and the results of the Highway Test push the Greenhouse Gas Index to a mediocre 3.1 points. Lowering the particle output and a more robust pollutant control would help the Tucson easily reach higher assessment results. Higher efficiency on the highway would add to the improved score.

Disclaimer [↗](#)

Specifications

Publication Date	Tested Car	Tyres	Emissions Class
10 2022	TMAJB811BNJ10xxxx	225/50 R19	Euro 6d AP
Mass	Engine Size	System Power/Torque	Declared CO ₂
1,642 kg	1,598 cc	169 kW/350 Nm	131 g/km
Declared Battery Capacity	Declared Driving Range	Declared Consumption	
1.49 kWh	n.a.	5.8l/100 km	



Think before you print