









2022

# **Hyundai TUCSON**

**HEV 1.6 T-GDI hybrid FWD automatic** 



Clean Air Index

**Energy Efficiency** Index



**Greenhouse Gas** Index



	Laboratory Test	NMHC	NO <sub>x</sub>	NH <sub>3</sub>	со	PN
<b>6.1</b> /10	Cold Test					
<b>6.7</b> /10	Warm Test					
0.0/10	Highway					
	Cold Ambient Test	Does not qu	ualify for addit	ional robustne	ess testing	
	Road Test					
<b>6.2</b> /10	On-Road Drive					
<b>1.0</b> /5	On-Road Short Trip					
	On-Road Heavy Load	Does not qu	ualify for addit	ional robustne	ess testing	
	On-Road Light Load	Does not qu	ualify for addit	ional robustne	ess testing	
	Congestion	Does not qu	ualify for addit	ional robustne	ess testing	













adequate marginal

#### **Comments**

The car's control of pollutant emissions does not impress. In the WLTC+ Lab Tests, the particles emissions come close to or exceed Green NCAP's upper thresholds. On the positive side, the standard species NMHC (unburnt hydro-carbons), NO, 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 about 7 times the upper threshold of NH<sub>3</sub>, high numbers of particles and skyrocketing CO emissions. Short urban trips are also not the vehicle's strength.



## **Energy Efficiency Tests**

	Laboratory Test	Energy	
<b>5.9</b> /10	Cold Test		
<b>6.0</b> /10	Warm Test		
<b>1.6</b> /10	Highway		
	Cold Ambient Test	Does not qualify for a	dditional robustness testing
		Consumption	Driving Range
	Average	<b>6.8</b> I/100 km	<b>811</b> km
	Worst-case	<b>9.1</b> I/100 km	<b>570</b> km









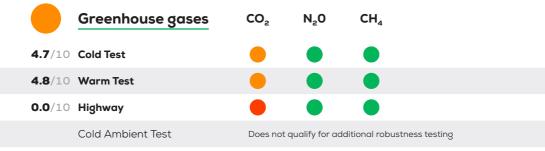




#### **Comments**

adequate marginal

The hybrid system of the Hyundai Tucson seems well designed and manages very well in keeping the consumption values down to 5–6 I/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 9.1 I/100 km - a behaviour typical for SUVs. Consequently, the Tucson's score for energy efficiency is below average.















#### **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 200 g/km and additional upstream 54 g  $CO_p$ -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  $N_2O$  and  $CH_4$  in all tests.

### **Our Verdict**

August 2023: The result of this car has been updated. Previously reported Ammonia (NH<sub>3</sub>) values were incorrect owing to a technical error with the equipment at the test laboratory and a correction has been applied.

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 9 I/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 2

## **Specifications**

Publication DateTested CarTyresEmissions Class $10\ 2022$ TMAJB811BNJ10xxx225/50 R19Euro 6d APMassEngine SizeSystem Power/TorqueDeclared  $CO_2$  $1.642\ kg$  $1.598\ cc$  $169\ kW/350\ Nm$  $131\ g/km$ 

Declared Battery Capacity
Declared Driving Range
Declared Consumption
1.49 kWh
n.a.
Declared Consumption
5.8 l/100 km

