

Toyota Corolla Cross

2.0 145 KW HYBRID FWD CVT



5.0 
/10

**Clean Air
Index**

5.6 
/10

**Energy Efficiency
Index**

4.3 
/10

**Greenhouse Gas
Index**

5.0
/10



Clean Air Tests



Laboratory Test

NMHC

NO_x

NH₃

CO

PN

6.3/10 Cold Test



7.5/10 Warm Test



0.0/10 Highway



Cold Ambient Test

Does not qualify for additional robustness testing



Road Test

6.4/10 On-Road Drive



2.6/5 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 145 kW HEV version of the Toyota Corolla Cross shows satisfactory performance of its exhaust aftertreatment system in the Cold and Warm Lab Tests, as well as in the On-road. However, a gross exceedance of CO emissions in the Highway Test prevents the vehicle from scoring a better result. The Toyota could have achieved a higher score with further particle number reduction and improved emissions control during high load situations like the full power demand accelerations in the Highway Test.

Energy Efficiency Tests



Laboratory Test

Energy

7.0/10 Cold Test



7.1/10 Warm Test



2.8/10 Highway



Cold Ambient Test

Does not qualify for additional robustness testing

Consumption

Driving Range

Average

5.9 l/100 km

785 km

Worst-case

8.1 l/100 km

529 km



n.a.



good



adequate



marginal



weak



poor

Comments

Despite being a SUV, the Corolla Cross makes good use of the efficiency potential of the hybrid electric powertrain with its naturally aspirated gasoline engine. The results make evident that the hybrid is best prepared for driving cycles with lower speeds and a lot of stop-and-go traffic – the Cold Lab Test requires 4.8 l/100 km and the real-world On-road Drive confirmed the value. The Highway Test, however, reveals high consumption of 8.1 l/100 km, mainly due to the SUV body type and the reduced potential of the hybrid system to save energy under high speed conditions.

4.3

/10

Greenhouse Gases Tests



Greenhouse gases

CO₂

N₂O

CH₄

6.1/10 Cold Test



6.3/10 Warm Test



0.7/10 Highway



Cold Ambient Test

Does not qualify for additional robustness testing



n.a.



good



adequate



marginal



weak



poor

Comments

The Greenhouse Gas Index is based on a Well-to-Wheel+ approach. Methane and laughing gas (N₂O) emissions are kept at close to zero levels and the car receives the foreseen bonus points. In the standard WLTC+ Lab Tests, about 105-108 g CO₂/km are measured at the tailpipe, less than the officially declared figure of 115 g/km. With the addition of some 28 g/km from petrol production and supply, the total CO₂-equivalent emissions rise to approx. 132-136 g/km. In the Highway Test the total figure is 231 g CO₂-eq./km, due to significantly higher fuel consumption.

Our Verdict

Here, Green NCAP tested the 2023 model of the Toyota Corolla Cross Hybrid with a 2.0 litre naturally aspirated gasoline engine, electric traction motor and automatic transmission (CVT). This is a mid-sized SUV targeting the buyers who look for high everyday comfort and functionality but still wanting a reasonably sized car. Because of that, this powertrain seems a very good choice, demonstrating good fuel consumption values in mixed driving cycles - under 5 l/100 km. However, motorway driving with higher speeds significantly increases the consumption figures. The performance of the exhaust aftertreatment system could be improved with focus on CO-emissions during high load situations and particle number emissions in short trips with cold engine start. The emitted greenhouse gases are not unusual for a vehicle of such configuration and cap the overall achievement, awarding the Corolla Cross Hybrid the fair result of 2 Green Stars with an Average Score of 49%.

Disclaimer [↗](#)

Specification

Tested Car

JTNABACB00J00xxxx

Publication Date 03 2024	Vehicle Class Small SUV	Tyres 225/50 R18	Emissions Class Euro 6d AP
Mass 1,470 kg	Engine Size 1,987 cc	System Power/Torque 145 kW/-	Declared CO₂ 115 g/km
Declared Battery Capacity n.a.	Declared Driving Range n.a.	Declared Consumption 5.1 l/100 km	

Heating Concept

Waste heat



Think before you print