

# Subaru Crosstrek

2.0 E-BOXER HYBRID AWD CVT



Clean Air  
Index



Energy Efficiency  
Index



Greenhouse Gas  
Index

<div><div></div></div>	Laboratory Test	NMHC	NO <sub>x</sub>	NH <sub>3</sub>	CO	PN
6.7/10	Cold Test	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
7.6/10	Warm Test	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
6.6/10	Highway	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Cold Ambient Test	Does not qualify for additional robustness testing				

<div><div></div></div>	Road Test					
6.9/10	On-Road Drive	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
2.6/5	On-Road Short Trip	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	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 Subaru Crosstrek demonstrates adequate performance in this part of the assessment. The vehicle shows an effective and robust control of all gaseous pollutants and even keeps ammonia (NH<sub>3</sub>) emissions to a minimum, but valuable points are lost due to mediocre particle reduction where, in the Highway Test, the emitted number approaches Green NCAP's upper threshold. Despite a relatively lower particle output compared to other tests, the On-Road Drive collects only 6.9 out of 10 available points.

# Energy Efficiency Tests



## Laboratory Test

## Energy

4.1/10 Cold Test



4.5/10 Warm Test



1.5/10 Highway



Cold Ambient Test

Does not qualify for additional robustness testing

## Consumption

## Driving Range

Average

7.7 l/100 km

636 km

Worst-case

9.2 l/100 km

521 km



n.a.



good



adequate



marginal













weak




poor


## Comments

The 118 V hybrid system of the e-BOXER Crosstrek helps the vehicle maintain reasonable consumption figures in the standard Cold and Warm Lab Tests. The SUV body increases the aerodynamic drag at higher speeds and the car needs 9.2 l/100 km in the Highway Test with full power accelerations and 130 km/h speed segments. On the more positive side, the real-world On-Road Drive used only 6.5 l/100 km, but the vehicle shouldn't be expected to shine in short Urban Trips with a cold engine start, where it recorded 9.6 l/100 km.


<div></div>	<u>Greenhouse gases</u>	CO <sub>2</sub>	N <sub>2</sub> O	CH <sub>4</sub>
	2.3/10 Cold Test			
	2.8/10 Warm Test			
	0.0/10 Highway			
	Cold Ambient Test	Does not qualify for additional robustness testing		




n.a.




good




adequate



marginal



weak



poor

### Comments

Non-regulated methane (CH<sub>4</sub>) and laughing gas (N<sub>2</sub>O) are practically not emitted and help the Crosstrek collect all available bonus points. However, the Greenhouse Gas Index is hugely impacted by the high fuel consumption and hence CO<sub>2</sub>-emissions in all of the test scenarios. In the Warm Lab Test, 40 g CO<sub>2</sub>-eq./km related to the upstream emissions of fuel supply are added to the tailpipe figure of 154 g CO<sub>2</sub>/km to result in 193.5 g CO<sub>2</sub>-eq./km. In the Highway Test, the total figure reaches 262 g CO<sub>2</sub>-eq./km and leads to no points at all for this test.

## Our Verdict

Green NCAP tested the 2024 model of the Subaru Crosstrek with a 2.0 litre naturally aspirated petrol engine, electric traction motor and a CVT transmission. Permanent all-wheel drive is an important Subaru characteristic and is one of the reasons this car is targeted by those looking for a vehicle allowing for frequent off-road drives. To alleviate the efficiency shortcomings of the powertrain layout, and to boost the dynamic performance, the vehicle is also equipped with a 118 V hybrid system which, combined with the boxer engine, Subaru calls the e-BOXER. The electric motor is capable of supporting the combustion engine with an additional 12.3 kW of power. Though it can assist the petrol engine in propelling the car in low-load situations and drive electrically at very low speeds, the effect on the vehicle's energy consumption is not remarkable. In high load scenarios like the Highway Test, the fuel consumption is high. In the other test scenarios, reasonable consumption values of 6.5 – 7 l/100 km are recorded, whereas the cold start short urban trip again pushed the demand to 9.6 l/100 km. Directly related to the petrol consumption figures are the greenhouse gas emissions, where the Crosstrek scored poorly. On the positive side, the e-BOXER generally convinced with good control of its gaseous pollutants, but eventually lost many points for relatively high particle emissions. Overall, with an average score of 39%, the Crosstrek collects 2 Green stars, while Euro NCAP recently awarded the Crosstrek with a 5 star safety performance.

## Disclaimer [↗](#)

## Specification

### Tested Car

JF1GUELLXRG01xxx

Publication Date	Vehicle Class	Tyres	Emissions Class
11 2024	Small Family Car	225/55R18 98V	Euro 6d AP
Mass	Engine Size	System Power/Torque	Declared CO <sub>2</sub>
1,628 kg	1,995 cc	100 kW/182 Nm	174 g/km
Declared Battery Capacity	Declared Driving Range	Declared Consumption	
n.a.	n.a.	7.7 l/100 km	

### Heating Concept

Waste heat



Think before you print