



2020

Audi A4

Avant 40 g-tron 2.0 CNG 4x2 automatic



4.6 
/10

Clean Air
Index

3.3 
/10

Energy Efficiency
Index

1.9 
/10

Greenhouse Gas
Index

4.6
/10



Clean Air Tests



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
5.1/10 Cold Test	●	●	●	●	●
4.3/10 Warm Test	●	●	●	●	●
0.0/10 Cold Ambient Test	●	●	●	●	●
5.7/10 Highway	●	●	●	●	●



Road Test

5.2/10 On-Road Drive	●	●	●	●	●
5.2/8 On-Road Heavy Load	●	●	●	●	●
3.2/5 On-Road Light Load	●	●	●	●	●
2.1/5 On-Road Short Trip	●	●	●	●	●
2.0/2 Congestion	●	●	●	●	●



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

The A4 g-tron has no particulate filter. Nevertheless, particulate number is not excessive in any of the tests. Control of non-Methane hydrocarbons is good, as is that of NO_x in most tests except the cold ambient temperature laboratory test and the on-road short trip. Control of the unregulated pollutant NH₃ is poor.

Energy Efficiency Tests



Laboratory Test

Energy

3.7/10 Cold Test



4.6/10 Warm Test



2.0/10 Cold Ambient Test



3.3/10 Highway



Consumption

Driving Range

Average

4.8 kg/100 km

360 km

Worst-case

5.6 kg/100 km

308 km



n.a.



good



adequate



marginal



weak



poor

Comments

The car scores modestly for energy efficiency, and slightly worse in the more demanding tests - cold ambient temperature and high-load - than the others. Based on Green NCAP's calculations, the range of the vehicle is typically around 350 km.

1.9



/10

Greenhouse Gases Tests



Greenhouse gases

CO₂

N₂O

CH₄

1.6/7 Cold Test



3.8/7 Warm Test



0.0/7 Cold Ambient Test



0.0/7 Highway



n.a.



good



adequate



marginal



weak



poor

Comments


This is the area of assessment where the A4 g-tron scores most poorly. The vehicle emits very little Nitrous Oxide, a powerful greenhouse gas but is let down by its control of Methane which reduces the index to 1.9.

Our Verdict

The Audi A4 g-tron is powered by compressed natural gas (CNG). The car has a small petrol tank (7 litres) but this is used as an emergency back-up only: if there is enough CNG in the tank, the car will operate almost exclusively on that fuel and the driver has no option to switch to petrol. Accordingly, the car was tested by Green NCAP only in CNG mode. In general, the car performs well in its mitigation of pollutant emissions, except for ammonia, which is not regulated by legislation and emissions of which were high in several tests. Efficiency is moderate, providing reasonably economical driving for a vehicle of this size. All-round performance is let down by the Greenhouse Gas Index, with control of Methane dragging the scoring down and, overall, the car emerges from the tests with a modest two-star rating.

Disclaimer

Publication Date 11 2020	Tested Car WAUZZZF47KA10xxxx	Emissions Class Euro 6d-Temp	Tyres 225/50 R17 94Y
Mass 1,661 kg	Engine Size 1,984 cc	Engine Power/Torque 125 kW/270 Nm	Published CO ₂ 128 g/km
	Battery Capacity n.a.	Published Driving Range n.a.	

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Think before you print



2020

BMW 3-Series

320d diesel 4x2 automatic



6.2 
/10

Clean Air
Index

6.0 
/10

Energy Efficiency
Index

0.6 
/10

Greenhouse Gas
Index



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
7.4/10 Cold Test					
7.4/10 Warm Test					
5.2/10 Cold Ambient Test					
4.9/10 Highway					



Road Test

6.9/10 On-Road Drive					
5.8/8 On-Road Heavy Load					
2.9/5 On-Road Light Load					
3.4/5 On-Road Short Trip					
0.0/2 Congestion					



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

The 320d keep particulate number (PN) under tight control, thanks to its diesel particulate filter (DPF). In general Oxides of Nitrogen (NO_x) are also kept in check by selective catalyst reduction (SCR) but are high in the on-road congestion test.

Energy Efficiency Tests



Laboratory Test

Energy

6.7/10 Cold Test



7.4/10 Warm Test



4.6/10 Cold Ambient Test



5.4/10 Highway



Consumption

Driving Range

Average

5.2 l/100 km

1144 km

Worst-case

6.4 l/100 km

926 km



n.a.



good



adequate



marginal
















weak



poor

Comments

The 320d is not an especially light car and, with a 140 kW engine, its performance in the Energy Efficiency assessment was impressive. Average consumption of just 5.2 l/100 km in the laboratory tests, combined with a 59 litre tank, leads to an average calculated driving range of 1,144 km.

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
0.5/7	Cold Test			
0.2/7	Warm Test			
0.0/7	Cold Ambient Test			
1.3/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


Emissions of Nitrous Oxide (N₂O), a powerful greenhouse gas that is not regulated by legislation, was high in all of Green NCAP's tests and the car lost virtually all points in this part of the assessment.

Our Verdict

The BMW 3 Series, now in its seventh generation, is tested here with the 2.0 litre turbocharged engine, and impresses and disappoints in roughly equal measure. Pollutant emissions are, in general, well controlled, thanks to selective catalyst reduction and a diesel particulate filter, and this is reflected in an index of 6.2 in this part of the assessment. Energy efficiency is also good, and the car scores well again in this area. However, emissions of Nitrous Oxide (N₂O), a powerful but unregulated greenhouse gas, are excessive in all of Green NCAP's tests, and the car scores almost nothing for its performance in this part of the assessment. Overall, the 320d clears the hurdle for a 2½ star rating.

Disclaimer

Publication Date 11 2020	Tested Car WBA5V51070AJ5xxx	Emissions Class Euro 6d-Temp	Tyres 225/45/18/95Y
Mass 1,572 kg	Engine Size 1,995 cc	Engine Power/Torque 140 kW/400 Nm	Published CO ₂ 138 g/km
	Battery Capacity n.a.	Published Driving Range n.a.	

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2020

Dacia Duster

Blue dCi 115 diesel 4x2 manual



5.1 
/10

Clean Air
Index

5.1 
/10

Energy Efficiency
Index

2.8 
/10

Greenhouse Gas
Index



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
6.2/10 Cold Test	●	●	●	●	●
7.3/10 Warm Test	●	●	●	●	●
4.6/10 Cold Ambient Test	●	●	●	●	●
4.4/10 Highway	●	●	●	●	●



Road Test

5.2/10 On-Road Drive	●	●	●	●	●
2.1/8 On-Road Heavy Load	●	●	●	●	●
3.7/5 On-Road Light Load	●	●	●	●	●
2.7/5 On-Road Short Trip	●	●	●	●	●
0.0/2 Congestion	●	●	●	●	●



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

The Duster generally performs well in its control of pollutant emissions. However, oxides of Nitrogen (NO_x) are high, especially in the cold ambient temperature test and the high-load highway cycle. This is reflected in the on-road tests where NO_x is again the weak point.

Energy Efficiency Tests



Laboratory Test

Energy

6.3/10 Cold Test



6.6/10 Warm Test



4.9/10 Cold Ambient Test



2.9/10 Highway



Consumption

Driving Range

Average

6.0 l/100 km

863 km

Worst-case

7.4 l/100 km

676 km



n.a.



good



adequate



marginal















weak



poor

Comments

Overall, energy efficiency is marginal. In the warm test, a fuel consumption of 5.1 l/100 km is adequate but this is offset by the performance in the high-load highway test, where consumption increases to 7.4 l/100 km

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
2.3/7	Cold Test			
2.5/7	Warm Test			
2.1/7	Cold Ambient Test			
1.4/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


Control of methane is good. However, emissions of Carbon Dioxide and control of Nitrous Oxide is weak or poor in all tests.

Our Verdict

This is the second generation of the Duster from Renault subsidiary Dacia and debuted in October 2018. With its affordable price, the Duster aims at a widespread audience. A 1.5 litre in-line 4-cylinder Diesel engine powers the car tested here, delivering 85 kW and a very hefty 260 Nm of torque. The exhaust after-treatment system includes selective catalyst reduction and a diesel particulate filter, and the car is approved as Euro 6d-Temp. Overall, the vehicle offers reasonable fuel consumption values and CO₂ emissions. The exhaust aftertreatment fulfils the legislative requirements and provides very good particle emissions control. Some improvement may help to reach better robustness also with regard to the NO_x emissions, which are in general well handled by the abatement systems. Better control of 'laughing gas' emissions (N₂O) would lead to a higher greenhouse gas index. As it is, this index is the car's weak point, at just 2.8 out of ten, and leading to a 2½ star rating.

Disclaimer

Publication Date 11 2020	Tested Car VF1HJD2026190xxxx	Emissions Class Euro 6d-Temp	Tyres 215/65 R16 (98)H
Mass 1,349 kg	Engine Size 1,461 cc	Engine Power/Torque 85 kW/260 Nm	Published CO ₂ 142 g/km
	Battery Capacity n.a.	Published Driving Range n.a.	

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HONDA



2020

Honda CR-V

2.0 i-MMD hybrid 4x2 CVT



5.3
/10 

Clean Air
Index

4.2
/10 

Energy Efficiency
Index

4.1
/10 

Greenhouse Gas
Index

5.3

/10



Clean Air Tests



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
5.8/10 Cold Test	●	●	●	●	●
7.1/10 Warm Test	●	●	●	●	●
4.1/10 Cold Ambient Test	●	●	●	●	●
0.0/10 Highway	●	●	●	●	●



Road Test

6.2/10 On-Road Drive	●	●	●	●	●
4.3/8 On-Road Heavy Load	●	●	●	●	●
3.3/5 On-Road Light Load	●	●	●	●	●
4.4/5 On-Road Short Trip	●	●	●	●	●
2.0/2 Congestion	●	●	●	●	●



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

Oxides of Nitrogen are well controlled in all tests, including the aggressive highway cycle and the cold ambient temperature test, and are well below the values recorded in the vehicle's type-approval tests. Carbon monoxide emissions are marginal in the standard lab test but robustness is poor, and values of CO are high in the highway cycle and the on-road heavy load test. A gasoline particulate filter (GPF) would have helped to reduce emissions of this pollutant matter.

Energy Efficiency Tests



Laboratory Test

Energy

5.9/10 Cold Test



6.9/10 Warm Test



2.5/10 Cold Ambient Test



1.8/10 Highway



Consumption

Driving Range

Average

7.0 l/100 km

847 km

Worst-case

9.2 l/100 km

620 km



n.a.



good



adequate



marginal



weak



poor

Comments

Values of CO₂ are below the value recorded during type approval for most of the test scenarios but exceed it in the high-load test and the cold ambient temperature tests. With a test weight of over 1,800 kg, the vehicle does well to achieve an Energy Efficiency Index of 4.2.

4.1



/10

Greenhouse Gases Tests



Greenhouse gases

CO₂

N₂O

CH₄

3.6/7 Cold Test



4.0/7 Warm Test



2.3/7 Cold Ambient Test



1.9/7 Highway



n.a.



good



adequate



marginal



weak



poor

Comments


The CR-V displays impressive control of Methane (CH₄) and, especially, of Nitrous Oxide (N₂O), which is not regulated by legislation. Scoring well for its control of these gases contributes to a Greenhouse Gas Index of 4.1.

Our Verdict

The CR-V is Honda's best-selling model and, according to them, the best-selling SUV in the world. Launched in 1995, it is tested here in its fifth-generation form, with a 2.0 petrol hybrid engine, producing 135 kW and continuously variable transmission (CVT). It is Honda's biggest SUV in Europe and weighed in at over 1,800 kg for Green NCAP's tests. A 2½ star rating is good going, and its performance is well balanced between the three areas of assessment. For pollutant emissions, levels of particulate emissions are below legislative limits in all scenarios, even though Green NCAP's tests are considerable tougher, but the car is not equipped with a gasoline particulate filter (GPF) which would have reduced emissions of this pollutant very considerably. Green NCAP is informed that vehicles produced from the end of 2020 are equipped with a GPF. As tested here, the car struggles mainly with the high-load test, in which carbon monoxide and ammonia (NH₃, a greenhouse gas not regulated by legislation) are high. But, overall, the car gets a very creditable rating for a vehicle of its size.

Disclaimer

Publication Date 11 2020	Tested Car JHMRT5860KX20xxx	Emissions Class Euro 6d-Temp	Tyres 235/60R18
Mass 1,812 kg	Engine Size 1,993 cc	Engine Power/Torque 107 kW/175 Nm	Published CO ₂ 156 g/km
	Battery Capacity n.a.	Published Driving Range n.a.	

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HYUNDAI



2020

Hyundai KONA

39.2 kWh electric 4x2 automatic



10.0 
/10

Clean Air
Index

10.0 
/10

Energy Efficiency
Index

10.0 
/10

Greenhouse Gas
Index

10.0
/10



Clean Air Tests



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
10.0/10 Cold Test	●	●	●	●	●
10.0/10 Warm Test	●	●	●	●	●
10.0/10 Cold Ambient Test	●	●	●	●	●
10.0/10 Highway	●	●	●	●	●



Road Test

10.0/10 On-Road Drive	●	●	●	●	●
8.0/8 On-Road Heavy Load	●	●	●	●	●
5.0/5 On-Road Light Load	●	●	●	●	●
5.0/5 On-Road Short Trip	●	●	●	●	●
2.0/2 Congestion	●	●	●	●	●



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments





Pure battery electric vehicles emit no tailpipe emissions and the KONA scores full points in this part of the assessment.

Energy Efficiency Tests



Laboratory Test

Energy

10.0/10	Cold Test	 →	20.4 kWh/100 km
10.0/10	Warm Test	 →	18.9 kWh/100 km
10.0/10	Cold Ambient Test	 →	29.8 kWh/100 km
10.0/10	Highway	 →	27.2 kWh/100 km

Consumption

Driving Range

Average	22.2 kWh/100 km	202 km
Worst-case	29.8 kWh/100 km	147 km



n.a.



good



adequate



marginal



weak



poor

Comments

Green NCAP currently assesses energy efficiency purely on a 'tank to wheel' basis i.e. upstream energy consumption, such as that used to generate the electricity in the first place, are not currently included. The KONA's efficiency is better than Green NCAP's maximum scoring limit in all tests, albeit only just in the case of the cold ambient test, so the car scores maximum points for energy efficiency.



Greenhouse gases

CO₂

N₂O

CH₄

7.0/7 Cold Test



7.0/7 Warm Test



7.0/7 Cold Ambient Test



7.0/7 Highway



n.a.



good



adequate



marginal



weak



poor

Comments


Pure battery electric vehicles emit no tailpipe emissions and the KONA scores full points in this part of the assessment.

Our Verdict

The KONA is the smallest of Hyundai's SUVs, positioned beneath the Tucson and Santa Fe. Launched in 2017 with a range of combustion engines, the EV followed soon after and that is the version that is tested here. As with all other pure electric vehicles, there are no tailpipe emissions so the car is assured of maximum points for Clean Air and for Greenhouse Gases. Even electric cars have to consume energy in order to move but, here too, the KONA's efficiency remains within the zone for which maximum points are scored (<30 kWh/100 km), although it gets close to the limit in the -7 degree test. All in all, the Kona's all-electric powertrain ensures a maximum five-star rating in Green NCAP.

Disclaimer

Publication Date 11 2020	Tested Car KMHK281HFKU02xxxx	Emissions Class Euro AX	Tyres 215/55/R17 94V
Mass 1,552 kg	Engine Size n.a.	Engine Power/Torque 100 kW/395 Nm	Published CO ₂ 0 g/km
	Battery Capacity 39.2 kWh	Published Driving Range 289 km	

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Think before you print



Jeep



2020

Jeep Renegade

1.6 Multijet diesel 4x2 manual



4.9
/10 

Clean Air
Index

4.7
/10 

Energy Efficiency
Index

0.8
/10 

Greenhouse Gas
Index

4.9
/10



Clean Air Tests



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
5.1/10 Cold Test	adequate	weak	good	adequate	adequate
5.9/10 Warm Test	good	marginal	good	good	adequate
3.1/10 Cold Ambient Test	adequate	weak	good	adequate	adequate
7.6/10 Highway	good	adequate	good	good	adequate



Road Test

5.4/10 On-Road Drive	n.a.	marginal	n.a.	good	adequate
1.7/8 On-Road Heavy Load	n.a.	weak	n.a.	good	weak
2.4/5 On-Road Light Load	n.a.	marginal	n.a.	good	adequate
3.5/5 On-Road Short Trip	n.a.	marginal	n.a.	good	good
0.0/2 Congestion	n.a.	weak	n.a.	n.a.	n.a.



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

In general, the Renegade performs well, selective catalyst reduction (SCR) and a diesel particulate filter (DPF) keeping oxides of Nitrogen (NO_x) and particulate number (PN) under control. Elevated values of NO_x are seen only in some of the more demanding test conditions.

Energy Efficiency Tests



Laboratory Test

Energy

5.6/10 Cold Test



5.8/10 Warm Test



3.4/10 Cold Ambient Test



3.9/10 Highway



Consumption

Driving Range

Average

6.1 l/100 km

799 km

Worst-case

7.1 l/100 km

678 km



n.a.



good



adequate



marginal
















weak



poor

Comments

The car shows a fair level of fuel efficiency and an average consumption of 6.1 l/100 km in the lab tests.

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
0.3/7	Cold Test			
0.5/7	Warm Test			
0.5/7	Cold Ambient Test			
1.2/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


This is the area of assessment in which the Renegade performs most poorly. Methane (CH₄) is well controlled in all tests. However, control of Nitrous Oxide (N₂O), a powerful greenhouse gas, is sufficiently poor to negate most the positive scores gained from the other greenhouse gases, resulting in a Greenhouse Gas Index of 0.8.

Our Verdict

The Jeep Renegade, a small SUV, was launched in 2014 and is tested here as a 4x2, although four wheel drive is also available. The engine on Green NCAP's car was the mid-range 1.6 turbodiesel, equipped with selective catalyst reduction (SCR) and a diesel particulate filter (DPF). On the whole, abatement of pollutant stands up quite well although oxides of Nitrogen (NO_x) are elevated in some of the more demanding tests. But the car is let down by its emissions of greenhouse gases. Nitrous Oxide (N₂O) is a potent greenhouse gas not regulated by legislation and emissions of this gas are high in all tests, resulting in a Greenhouse Gas Index of only 0.8. A pity, as performance to match the two other areas of assessment would have gained the Renegade an extra star.

Disclaimer

Publication Date	Tested Car	Emissions Class	Tyres
11 2020	1C4BU0000KPJ2xxxx	Euro 6d-Temp	215/60 R1
Mass	Engine Size	Engine Power/Torque	Published CO ₂
1,458 kg	1,598 cc	88 kW/320 Nm	150 g/km
	Battery Capacity	Published Driving Range	
	n.a.	n.a.	

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2020

Kia Sportage

1.6 CRDi diesel 4x4 automatic



3.4 
/10

Clean Air
Index

3.2 
/10

Energy Efficiency
Index

0.1 
/10

Greenhouse Gas
Index



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
5.6/10 Cold Test	●	●	●	●	●
6.4/10 Warm Test	●	●	●	●	●
0.0/10 Cold Ambient Test	●	●	●	●	●
0.0/10 Highway	●	●	●	●	●



Road Test

5.2/10 On-Road Drive	●	●	●	●	●
0.0/8 On-Road Heavy Load	●	●	●	●	●
3.6/5 On-Road Light Load	●	●	●	●	●
2.6/5 On-Road Short Trip	●	●	●	●	●
1.0/2 Congestion	●	●	●	●	●



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

In general, the car performs reasonably. Non-methane hydrocarbons are well controlled in the laboratory tests and values of CO are low in all tests. There is good control of NO_x in the standard laboratory test but this is lost in some of the more challenging scenarios like the high-load highway test.

Energy Efficiency Tests



Laboratory Test

Energy

4.5/10 Cold Test



5.1/10 Warm Test



1.7/10 Cold Ambient Test



1.6/10 Highway



Consumption

Driving Range

Average

6.9 l/100 km

915 km

Worst-case

8.2 l/100 km

756 km



n.a.



good



adequate



marginal
















weak



poor

Comments

The Sportage is quite heavy for a car in this class and this takes a toll on the efficiency, with a fuel consumption value of 8.2 l/100 km in the high-load highway test.

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
0.0/7	Cold Test			
0.0/7	Warm Test			
0.0/7	Cold Ambient Test			
0.5/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


Methane emissions are controlled better than those of other greenhouse gases but, overall, the performance in this part of the assessment is poor. In particular, emissions of N₂O were high in all tests, negating the slightly better values of CO₂ and CH₄.

Our Verdict

Kia's compact SUV, the Sportage, has come a long way since the original version was launched in 1993. The car is tested here with the 1.6 diesel engine with 48V mild-hybrid technology. It has a comprehensive range of exhaust after-treatment, including selective catalytic reduction (SCR), a lean NO_x trap catalyst and a diesel particulate filter (DPF). Nevertheless, with an overall rating of just 1½ stars, there is room for improvement. Carbon monoxide remains well below legislative limits under all test conditions and, under standard laboratory conditions, NO_x emissions are adequately controlled. However, the vehicle is not robust in this regard and the more challenging tests lead to high values of NO_x. With its permanent four wheel drive and a fairly high test mass, efficiency is not the best. But it is in the area of greenhouse gas emissions that the car performs most poorly. In particular, N₂O emissions are high and this has a smothering effect on the car's score in this area. With an index of just 0.1 in this part of the assessment, the weighted index is dragged down and the car effectively loses half a star because of this aspect of its performance.

Disclaimer

Publication Date	Tested Car	Emissions Class	Tyres
11 2020	U5YPK812HLL86xxxx	Euro 6d-Temp	245/45R19 98W
Mass	Engine Size	Engine Power/Torque	Published CO ₂
1,744 kg	1,598 cc	100 kW/320 Nm	161 g/km
	Battery Capacity	Published Driving Range	
	n.a.	n.a.	

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Think before you print



MAZDA



2020

Mazda CX-5

SKYACTIV-G 165 petrol 4x2 manual



3.8
/10 

Clean Air
Index

4.1
/10 

Energy Efficiency
Index

3.7
/10 

Greenhouse Gas
Index

3.8
/10



Clean Air Tests



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
5.5/10 Cold Test	adequate	adequate	adequate	adequate	weak
6.5/10 Warm Test	good	adequate	adequate	good	weak
1.9/10 Cold Ambient Test	poor	adequate	marginal	poor	poor
0.0/10 Highway	adequate	good	poor	poor	weak



Road Test

5.8/10 On-Road Drive	n.a.	adequate	n.a.	good	weak
0.0/8 On-Road Heavy Load	n.a.	good	n.a.	poor	poor
3.2/5 On-Road Light Load	n.a.	good	n.a.	good	weak
3.1/5 On-Road Short Trip	n.a.	adequate	n.a.	marginal	marginal
1.0/2 Congestion	n.a.	good	n.a.	n.a.	n.a.



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

The CX-5 performs well in the cold test, with adequate control of all pollutants except particle number, where the car's lack of a GPF (gasoline particulate filter) is evident. The car also does well in most of the on-road tests. However, the pollution abatement system is not robust and, where high engine loads are required, values of CO and of particle number become excessive.

Energy Efficiency Tests



Laboratory Test

Energy

4.8/10 Cold Test



5.4/10 Warm Test



3.9/10 Cold Ambient Test



2.6/10 Highway



Consumption

Driving Range

Average

7.5 l/100 km

758 km

Worst-case

8.6 l/100 km

652 km



n.a.



good



adequate



marginal
















weak



poor

Comments

The CX-5 scores quite well in this part of the assessment. Average consumption is 7.5 l/100 km, giving a range of some 760 km on a full tank. Efficiency drops only a little in the high-load test.

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
2.8/7	Cold Test			
3.2/7	Warm Test			
2.5/7	Cold Ambient Test			
2.1/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


The CX-5 shows good control of two of the most potent greenhouse gases: Methane (CH₄) and Nitrous Oxide (N₂O). The latter is not regulated by legislation and the low values recorded contribute towards the credible score of 3.7 in this part of the assessment.

Our Verdict

Originally launched in 2012 as Mazda's offering in the highly competitive compact crossover SUV segment, the car tested here is the second generation model released in 2017. With a 121 kW 2.0 litre Skyactiv engine, the car has a three-way catalyst but no gasoline particulate filter. Under normal test conditions, the car performs well for pollutant abatement, with good control of most emissions. However, when the engine is pushed, as it is in Green NCAP's robustness tests, emissions control deteriorates and values of CO and particulates become very high. However, emissions of some important greenhouse gases are tightly controlled and the vehicle scores relatively well in that part of the assessment. All in all, a balanced performance that earns the CX-5 a two-star overall rating.

Disclaimer

Publication Date 11 2020	Tested Car JMZKF6W760085xxxx	Emissions Class Euro 6d-Temp	Tyres 225/55 R19 99V
Mass 1,520 kg	Engine Size 1,998 cc	Engine Power/Torque 121 kW/210 Nm	Published CO ₂ 168 g/km
	Battery Capacity n.a.	Published Driving Range n.a.	

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Mercedes-Benz



2020

Mercedes-Benz C-Class

220d 9G-TRONIC diesel 4x2 automatic



7.0 
/10

Clean Air
Index

5.7 
/10

Energy Efficiency
Index

2.9 
/10

Greenhouse Gas
Index



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
6.9/10 Cold Test	●	●	●	●	●
7.8/10 Warm Test	●	●	●	●	●
5.7/10 Cold Ambient Test	●	●	●	●	●
8.2/10 Highway	●	●	●	●	●



Road Test

7.3/10 On-Road Drive	●	●	●	●	●
5.8/8 On-Road Heavy Load	●	●	●	●	●
2.7/5 On-Road Light Load	●	●	●	●	●
4.0/5 On-Road Short Trip	●	●	●	●	●
1.0/2 Congestion	●	●	●	●	●



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

The C220d performs very well in this part of the assessment. Results are predominantly good or adequate in all tests, with all pollutants well controlled. Even in the more demanding tests, such as the cold ambient temperature and high-load highway tests, emissions are not excessive for any pollutant.

Energy Efficiency Tests



Laboratory Test

Energy

6.7/10 Cold Test



7.0/10 Warm Test



3.7/10 Cold Ambient Test



5.4/10 Highway



Consumption

Driving Range

Average

5.3 l/100 km

1258 km

Worst-case

6.9 l/100 km

955 km



n.a.



good



adequate



marginal



weak
















poor

Comments

Given that the C220d is quite a heavy car and has a 143 kW engine, an average fuel consumption of 5.3 l/100 km in the laboratory tests is an impressive achievement. The car's good efficiency is reflected in the index of 5.7.

2.9 Greenhouse Gases Tests

/10

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
2.3/7	Cold Test			
2.4/7	Warm Test			
1.6/7	Cold Ambient Test			
2.1/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


This is the area of assessment in which the C220d performs most weakly. Control of Methane (CH₄) is good in all tests but values of Nitrous Oxide (N₂O) exceed Green NCAP's upper limits and this decreases the Greenhouse Gas Index.

Our Verdict

The C-Class has been in Mercedes-Benz's line-up, and one of its best-sellers, for many years. This is the fourth generation vehicle and is tested here with the 143 kW turbodiesel, equipped with selective catalyst reduction (SCR) and a diesel particulate filter (DPF). This after-treatment works very well, with oxides of Nitrogen (NO_x) and particulates being kept under control, even in Green NCAP's more demanding tests. Turning in a fuel consumption figure of 6.9 l/100 km in the high-load highway test is a credit to the vehicle's energy efficiency. Sadly, the average index and the car's star rating are limited by the car's emissions of greenhouse gases. Here, values of Nitrous Oxide (N₂O), a very potent greenhouse gas but one which is not regulated by legislation, exceed Green NCAP's limits and this drops the index in this area to 2.9. Nevertheless, the car emerges with a good 3 star rating overall.

Disclaimer

Publication Date	Tested Car	Emissions Class	Tyres
11 2020	WDD2050141R46xxxx	Euro 6d-Temp	225/45 R18
Mass	Engine Size	Engine Power/Torque	Published CO ₂
1,615 kg	1,950 cc	143 kW/400 Nm	117 g/km
	Battery Capacity	Published Driving Range	
	n.a.	n.a.	

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Think before you print



Mercedes-Benz



2020

Mercedes-Benz V-Class

250d diesel 4x2 automatic



7.2 
/10

Clean Air
Index

1.2 
/10

Energy Efficiency
Index

0.0 
/10

Greenhouse Gas
Index



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
7.0/10 Cold Test					
8.2/10 Warm Test					
6.4/10 Cold Ambient Test					
7.2/10 Highway					



Road Test

7.2/10 On-Road Drive					
5.8/8 On-Road Heavy Load					
3.8/5 On-Road Light Load					
3.5/5 On-Road Short Trip					
2.0/2 Congestion					



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

The V250d performs very well in this part of the assessment. All pollutant emissions are well controlled across all test types, indicating excellent robustness in the engine and exhaust after-treatment systems.

Energy Efficiency Tests



Laboratory Test

Energy

2.2/10 Cold Test



2.9/10 Warm Test



0.0/10 Cold Ambient Test



0.0/10 Highway



Consumption

Driving Range

Average

8.4 l/100 km

848 km

Worst-case

10.4 l/100 km

675 km



n.a.



good



adequate



marginal



weak



poor

Comments

With a high weight, the V-Class struggles in this part of the assessment. Energy consumption is high and the result in the cold ambient temperature test, in particular, offsets some more positive performances in the other tests.



Greenhouse gases

CO₂

N₂O

CH₄

0.0/7 Cold Test



0.0/7 Warm Test



0.0/7 Cold Ambient Test



0.0/7 Highway



n.a.



good



adequate



marginal



weak



poor

Comments


While the V-Class maintains good control of Methane, this is offset by poor performance for the other greenhouse gases measured by Green NCAP.

Our Verdict

The V-Class shares its platform with the Vito, a light commercial van produced by Mercedes-Benz. Tested here as the 250d, it comes with a comprehensive array of exhaust after-treatment devices: high/low pressure exhaust gas recirculation (EGR); a diesel particulate filter (DPF); and selective catalytic reduction (SCR). Combined, these prove very effective at mitigating pollutant emissions and the vehicle scores an impressive 7.2 for Clean Air. Sadly, the vehicle is let-down by its score for Energy Efficiency where its weight counts against it. It takes a lot of energy to move a vehicle this heavy, as demonstrated by the worst-case fuel consumption of 10 l/100 km. However, used to maximum capacity, the vehicle can transport roughly double the number of people that a large SUV of similar weight would be able to. Overall, the star rating of only 1½ is a reflection of Green NCAP's holistic approach to environmental testing and would have been considerably higher were it based on Clean Air alone.

Disclaimer

Publication Date 11 2020	Tested Car WDF4478131365xxxx	Emissions Class Euro 6d-Temp	Tyres 245/45 R19 Y XL
Mass 2,359 kg	Engine Size 1,950 cc	Engine Power/Torque 140 kW/440 Nm	Published CO ₂ 202 g/km
	Battery Capacity n.a.	Published Driving Range n.a.	

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2020

Nissan Qashqai

1.3 DIGT petrol 4x2 manual



6.1 
/10

Clean Air
Index

4.5 
/10

Energy Efficiency
Index

4.1 
/10

Greenhouse Gas
Index

6.1

/10



Clean Air Tests



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
5.6/10 Cold Test	●	●	●	●	●
7.7/10 Warm Test	●	●	●	●	●
0.7/10 Cold Ambient Test	●	●	●	●	●
7.1/10 Highway	●	●	●	●	●



Road Test

6.8/10 On-Road Drive	●	●	●	●	●
5.2/8 On-Road Heavy Load	●	●	●	●	●
3.8/5 On-Road Light Load	●	●	●	●	●
4.3/5 On-Road Short Trip	●	●	●	●	●
2.0/2 Congestion	●	●	●	●	●



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

Pollutant emissions are, in general, well controlled. However, in the cold ambient temperature test, where the car is tested at -7 degrees, values of non-Methane hydrocarbons (NMHC) and ammonia (NH₃), which is not regulated by legislation, are above Green NCAP's upper limits and the car scores poorly in this test.

Energy Efficiency Tests



Laboratory Test

Energy

4.9/10 Cold Test



5.3/10 Warm Test



4.2/10 Cold Ambient Test



3.8/10 Highway



Consumption

Driving Range

Average

7.2 l/100 km

770 km

Worst-case

7.8 l/100 km

705 km



n.a.



good



adequate



marginal



weak
















poor

Comments

Energy efficiency is marginal, with an average of 7.2 l/100 km fuel consumption in the laboratory tests.

4.1 Greenhouse Gases Tests

/10

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
3.0/7	Cold Test			
3.2/7	Warm Test			
2.8/7	Cold Ambient Test			
2.6/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


On the whole, control of greenhouse gases is respectable, especially that of Methane (CH₄) and of Nitrous Oxide (N₂O). However, emissions of carbon dioxide in the high-load highway test are beyond Green NCAP's upper limits.

Our Verdict

The Qashqai was launched in 2006 and is now in its second generation, with a third expected soon. The car tested here is powered by Nissan's 103 kW 1.3 DIGT (direct-injection gasoline turbo) petrol engine. The car was tested with settings appropriate for the tyres fitted to the car until the end of 2019. Since the start of 2020, more energy efficient tyres, with lower rolling resistance, have been standard equipment and it is likely that the car may have scored better in the Energy Efficiency Index if tested with these tyres. Nevertheless, the car performed well overall. Good control of pollutant emissions, let down only by its performance in the cold ambient temperature test, gives an impressive index of 6.1 in the Clean Air assessment. Together with reasonable control of greenhouse gases, the car emerges with 2½ stars and is unlucky to miss out a 3 star rating.

Disclaimer

Publication Date 11 2020	Tested Car SJNFFAJ11U264 _{xxxx}	Emissions Class Euro 6d-Temp	Tyres 215/55 R18
Mass 1,340 kg	Engine Size 1,332 cc	Engine Power/Torque 103 kW/0 Nm	Published CO ₂ 160 g/km
	Battery Capacity n.a.	Published Driving Range n.a.	

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2020

Opel/Vauxhall Zafira Life

S 2.0 diesel 4x2 automatic



6.8 
/10

Clean Air
Index

1.3 
/10

Energy Efficiency
Index

0.1 
/10

Greenhouse Gas
Index

6.8
/10



Clean Air Tests



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
7.5/10 Cold Test	●	●	●	●	●
8.8/10 Warm Test	●	●	●	●	●
6.1/10 Cold Ambient Test	●	●	●	●	●
3.9/10 Highway	●	●	●	●	●



Road Test

7.3/10 On-Road Drive	●	●	●	●	●
6.1/8 On-Road Heavy Load	●	●	●	●	●
3.2/5 On-Road Light Load	●	●	●	●	●
3.9/5 On-Road Short Trip	●	●	●	●	●
1.0/2 Congestion	●	●	●	●	●



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

The Zafira impresses with its performance in the Clean Air assessment. In most tests, particulate number was some two orders of magnitude below the type approval value, and in some cases, three orders of magnitude lower. Oxides of Nitrogen (NO_x) are somewhat high in the high-load test and in the cold ambient test but, otherwise, performance is predominantly good or adequate for all pollutants across the whole suite of tests.

Energy Efficiency Tests



Laboratory Test

Energy

2.3/10 Cold Test



2.9/10 Warm Test



0.3/10 Cold Ambient Test



0.0/10 Highway



Consumption

Driving Range

Average

8.4 l/100 km

848 km

Worst-case

10.0 l/100 km

700 km



n.a.



good



adequate



marginal















weak



poor

Comments

The Zafira is heavy, weighing in at around two and a half tonnes for most of Green NCAP's tests, and this is reflected in its energy efficiency. The worst-case fuel-consumption of 10 l/100 km was recorded in the high-load test, although marginal performance was demonstrated in some other scenarios.

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
0.0/7	Cold Test			
0.0/7	Warm Test			
0.0/7	Cold Ambient Test			
0.5/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


The Zafira gets a poor index of only 0.1 for its performance in control of Greenhouse Gas emissions. N₂O is a very strong greenhouse gas and better control of this would have contributed to better performance in this area.

Our Verdict

The Zafira Life, tested here with the 130 kW turbocharged diesel engine, is equipped with an impressive array of after-treatment devices, including high-pressure exhaust gas recirculation (HP EGR), selective catalytic reduction (SCR) and a diesel particulate filter (DPF). And they work to make the vehicle a clean one, with an impressive performance in controlling pollutant emissions in almost all tests. However, its weight counts against in Energy Efficiency although it should be borne in mind that the vehicle can, at maximum capacity, transport roughly twice the number of people as a regular passenger car or a SUV of similar weight. But it is the emissions of greenhouse gases that most lets the car down, an index of 0.1 in this area dragging down the good and moderate scores in other areas, and leading to a rating of two stars.

Disclaimer

Publication Date	Tested Car	Emissions Class	Tyres
11 2020	VXEVEEHZ8LZ00xxxx	Euro 6d	215/70R17C
Mass	Engine Size	Engine Power/Torque	Published CO ₂
2,277 kg	1,997 cc	130 kW/400 Nm	206 g/km
	Battery Capacity	Published Driving Range	
	n.a.	n.a.	

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2020

VW Transporter

California 6.1 2.0 TDI diesel 4X4 automatic



5.6 
/10

Clean Air
Index

0.6 
/10

Energy Efficiency
Index

0.0 
/10

Greenhouse Gas
Index

5.6
/10



Clean Air Tests



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
5.9/10 Cold Test					
7.2/10 Warm Test					
0.0/10 Cold Ambient Test					
6.4/10 Highway					



Road Test

6.0/10 On-Road Drive					
6.0/8 On-Road Heavy Load					
4.0/5 On-Road Light Load					
2.7/5 On-Road Short Trip					
1.0/2 Congestion					



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

This is the area of assessment in which the Transporter most impresses. The exhaust after-treatment system struggles with emissions of Oxides of Nitrogen (NO_x) in some of the tests but, otherwise, control of pollutant emissions is very creditable, including that of ammonia (NH₃) which is not currently regulated by legislation in Europe. Carbon monoxide emissions are also low, and this contributes to a very respectable score of 5.6 for this part of the rating.

Energy Efficiency Tests



Laboratory Test

Energy

0.9/10 Cold Test



1.6/10 Warm Test



0.0/10 Cold Ambient Test



0.0/10 Highway



Consumption

Driving Range

Average

9.3 l/100 km

768 km

Worst-case

10.9 l/100 km

644 km



n.a.



good



adequate



marginal
















weak



poor

Comments

The Transporter's high weight counts against it when it comes to efficiency, and this is reflected in the worst-case fuel consumption of 11 l/100 km. Points gained in some tests are largely offset by losses in the cold ambient temperature test, the result being a very low overall score and an index of zero.

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
0.0/7	Cold Test			
0.0/7	Warm Test			
0.0/7	Cold Ambient Test			
0.0/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


The Transporter controls its emissions of Methane (CH₄) very well. However, any points gained for that gas are lost because of the high values of Nitrous Oxide(N₂O) which are emitted, and the vehicle ends up with an index of zero for this part of the assessment.

Our Verdict

The Volkswagen Transporter was available to the test laboratory only in the form of the 'California', the camper-van variant. This is slightly heavier than the people carrier but the results are likely to be similar. The vehicle has selective catalyst reduction (SCR) for control of NO_x and a diesel particulate filter, and these work well, in general. Values of carbon monoxide emissions are also low, and the Transporter scores an impressive 5.6 in the Clean Air Index. However, its energy efficiency is low although it should be borne in mind that, as a people carrier, it can transport several more people than could a large SUV of similar weight. Nevertheless, combined with a poor performance for greenhouse gases, the average index is dragged down and the overall rating is a very modest 1½ star.

Disclaimer

Publication Date	Tested Car	Emissions Class	Tyres
11 2020	WV2ZZZ7HZLH01xxxx	Euro 6d-Temp	255/45 R18 103 H XL
Mass	Engine Size	Engine Power/Torque	Published CO ₂
2,599 kg	1,968 cc	146 kW/450 Nm	240 g/km
	Battery Capacity	Published Driving Range	
	n.a.	n.a.	

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2020

VW Polo

1.0 TS petrol 4x2 manual



6.3
/10 

Clean Air
Index

6.2
/10 

Energy Efficiency
Index

4.9
/10 

Greenhouse Gas
Index

6.3

/10



Clean Air Tests



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
4.9/10 Cold Test	adequate	adequate	poor	marginal	weak
7.1/10 Warm Test	good	good	marginal	adequate	weak
4.0/10 Cold Ambient Test	weak	adequate	weak	marginal	weak
5.7/10 Highway	good	good	poor	marginal	weak



Road Test

6.9/10 On-Road Drive	n.a.	good	n.a.	good	marginal
5.5/8 On-Road Heavy Load	n.a.	good	n.a.	good	marginal
3.6/5 On-Road Light Load	n.a.	good	n.a.	good	marginal
4.4/5 On-Road Short Trip	n.a.	adequate	n.a.	adequate	good
2.0/2 Congestion	n.a.	good	n.a.	n.a.	n.a.



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

Oxides of Nitrogen (NO_x) are well controlled in all tests and carbon monoxide is kept at acceptable levels. Particulates, once a problem for small, turbocharged direct-injection engines, are kept in check by the gasoline particulate filter (GPF). Only ammonia (NH₃), which is not regulated by legislation, shows poor results in some tests.

Energy Efficiency Tests



Laboratory Test

Energy

7.0/10 Cold Test



7.2/10 Warm Test



5.7/10 Cold Ambient Test



5.0/10 Highway



Consumption

Driving Range

Average

6.0 l/100 km

679 km

Worst-case

6.9 l/100 km

577 km



n.a.



good



adequate



marginal



weak
















poor

Comments

The Polo is not a heavy car and, combined with its small, fuel-efficient engine, it turns in a good result in this part of the assessment. The declared CO₂ value of 128 g/100 km was well matched in the standard laboratory test.

4.9 Greenhouse Gases Tests

/10

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
3.8/7	Cold Test			
4.0/7	Warm Test			
3.3/7	Cold Ambient Test			
2.9/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


Nitrous Oxide (N₂O) and Methane (CH₄), both very potent greenhouse gases, were well controlled with good or adequate results in all tests.

Our Verdict

There has been a Polo in the Volkswagen line-up since 1975, testament to its enduring appeal. Now in its sixth generation, the car is tested here with the 1.0 litre, 3 cylinder turbocharged direct injection petrol engine, producing 85 kW, and turns in a very creditable performance. The car's exhaust after-treatment - a three-way catalyst and a gasoline particulate filter (GPF) - do a good job of keeping pollutant emissions down. Oxides of Nitrogen are low in all tests and the GPF, much needed with a small direct-injection turbocharged engine keeps particulate number safely within limits. With a modest weight, the car scores well also in Energy Efficiency. The Greenhouse Gas Index is a little lower than the others but the car emerges from Green NCAP's tests just shy of a 3½ star rating.

Disclaimer

Publication Date	Tested Car	Emissions Class	Tyres
11 2020	WVWZZZAWZLY02xxxx	Euro 6 DG	185/65 R15
Mass	Engine Size	Engine Power/Torque	Published CO ₂
1,132 kg	999 cc	85 kW/200 Nm	128 g/km
	Battery Capacity	Published Driving Range	
	n.a.	n.a.	

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2020

VW Passat

2.0 TDI DSG diesel 4x2 automatic



4.6 
/10

Clean Air
Index

6.0 
/10

Energy Efficiency
Index

2.1 
/10

Greenhouse Gas
Index

4.6
/10



Clean Air Tests



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
6.8/10 Cold Test	●	●	●	●	●
7.0/10 Warm Test	●	●	●	●	●
4.0/10 Cold Ambient Test	●	●	●	●	●
0.0/10 Highway	●	●	●	●	●



Road Test

5.3/10 On-Road Drive	●	●	●	●	●
2.2/8 On-Road Heavy Load	●	●	●	●	●
3.1/5 On-Road Light Load	●	●	●	●	●
4.2/5 On-Road Short Trip	●	●	●	●	●
0.0/2 Congestion	●	●	●	●	●



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

In many of the tests, pollutant emissions are well controlled. However, in the more demanding tests - cold ambient temperature and high load in the laboratory, and the heavy load on-road test, for example - Oxides of Nitrogen (NO_x) emissions are high. Indeed, in the high-load highway test, values of NO_x are so high that the Passat loses all points.

Energy Efficiency Tests



Laboratory Test

Energy

6.8/10 Cold Test



7.2/10 Warm Test



5.1/10 Cold Ambient Test



5.1/10 Highway



Consumption

Driving Range

Average

6.0 l/100 km

1116 km

Worst-case

6.9 l/100 km

957 km



n.a.



good



adequate



marginal



weak



poor














Comments

For a car which is quite heavy and which has quite a large engine, the Passat turns in an impressive performance for Energy Efficiency. Combined with its 66 litre fuel tank, this makes for an average driving range of 1,116 km, based on Green NCAP's laboratory tests.

2.1

/10

Greenhouse Gases Tests

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
1.9/7	Cold Test			
2.1/7	Warm Test			
1.7/7	Cold Ambient Test			
0.5/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


This is where the Passat scores weakest. Methane (CH₄) is well controlled in all tests. However, emissions of Nitrous Oxide (N₂O), a powerful but unregulated greenhouse gas, are high in all tests.

Our Verdict

The name 'Passat' has almost become a byword for dependency and reliability. Tested here as a 140 kW 2.0 litre turbocharged diesel, and equipped with some very up-to-date exhaust after-treatment, the car turns in a mixed bag of results. In the Clean Air assessment, selective catalyst reduction manages to keep Oxides of Nitrogen (NO_x) in check in the less demanding tests. However, in the cold ambient temperature test, the high-load highway test and the heavy-load on-road tests, values of NO_x are very much higher and the car loses points. The test laboratory also noted the high frequency of DPF (diesel particulate filter) regeneration - every 200 to 250 km or so. During these regenerations, emissions of NO_x and of particulates increased significantly and approached legislative limits. Energy efficiency is good for a car of this size and power. Emissions of N₂O lead to a poorer score for greenhouse gases than in the other areas of assessment, but the car nevertheless emerges with a respectable 2½ star rating.

Disclaimer

Publication Date 11 2020	Tested Car WVWZZZ3CZLE04xxx	Emissions Class Euro 6d-Temp	Tyres 215 / 55 R17
Mass 1,584 kg	Engine Size 1,968 cc	Engine Power/Torque 140 kW/400 Nm	Published CO ₂ 155 g/km
	Battery Capacity n.a.	Published Driving Range n.a.	

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TOYOTA



2020

Toyota C-HR

1.8 hybrid 4x2 automatic



6.0 
/10

**Clean Air
Index**

6.9 
/10





















**Energy Efficiency
Index**

5.4 
/10

**Greenhouse Gas
Index**




























Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
6.2/10 Cold Test					
7.8/10 Warm Test					
1.2/10 Cold Ambient Test					
7.2/10 Highway					



Road Test

6.8/10 On-Road Drive					
4.8/8 On-Road Heavy Load					
2.4/5 On-Road Light Load					
4.3/5 On-Road Short Trip					
2.0/2 Congestion					



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

The C-HR performs well in the on-road tests and in the more straightforward of the laboratory tests. However, particulates and emissions of other pollutants except NO_x are high in the cold ambient temperature test.

Energy Efficiency Tests



Laboratory Test

Energy

8.1/10 Cold Test



8.9/10 Warm Test



6.0/10 Cold Ambient Test



4.8/10 Highway



Consumption

Driving Range

Average

5.4 l/100 km

839 km

Worst-case

7.1 l/100 km

608 km



n.a.



good



adequate



marginal



weak
















poor

Comments

Hybrid technology aids the efficiency of the C-HR and the car performs well in this part of the assessment, with an index of 6.9.

5.4 Greenhouse Gases Tests

/10

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
4.2/7	Cold Test			
4.6/7	Warm Test			
3.5/7	Cold Ambient Test			
3.0/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


The C-HR shows very good control of Methane (CH₄) and Nitrous Oxide (N₂O) emissions, two very powerful greenhouse gases. CO₂ is elevated in the high-load highway test.

Our Verdict

The C-HR went on sale in 2017 with a choice of a 1.2 turbocharged petrol engine or 1.8 hybrid. A 2.0 hybrid was added in 2020 and, from 2021, the only the hybrid variants will be offered. The 1.8 hybrid, which comes only as 4x2 and with continuously variable transmission (CVT) is the version tested here. The car takes full advantage of Toyota's long-term commitment to hybrid technology, utilising it to good advantage in most situations. Fuel efficiency in the standard lab tests is very good and pollutant emissions are well controlled. The lack of a gasoline particulate filter (GPF) is regrettable as this would improve its performance even more. Green NCAP is informed that, from the end of 2020, a GPF is fitted to the C-HR. As tested, the C-HR delivers good, balanced scoring in all areas of assessment and the car emerges with a creditable 3½ star rating.

Disclaimer

Publication Date	Tested Car	Emissions Class	Tyres
11 2020	NMTKZ3BX00R18xxxx	Euro 6d-Temp	225/50 R18
Mass	Engine Size	Engine Power/Torque	Published CO ₂
1,429 kg	1,798 cc	72 kW/142 Nm	111 g/km
	Battery Capacity	Published Driving Range	
	n.a.	n.a.	

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SUZUKI



2020

Suzuki Vitara

1.0 Boosterjet petrol 4x2 manual



3.3 
/10

Clean Air
Index

4.9 
/10

Energy Efficiency
Index

4.2 
/10

Greenhouse Gas
Index

3.3

/10



Clean Air Tests



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
3.7/10 Cold Test	Orange	Yellow	Brown	Brown	Brown
6.2/10 Warm Test	Green	Yellow	Yellow	Orange	Brown
0.0/10 Cold Ambient Test	Red	Yellow	Red	Red	Brown
0.0/10 Highway	Yellow	Green	Red	Red	Brown



Road Test

5.0/10 On-Road Drive	Grey	Yellow	Grey	Orange	Brown
0.0/8 On-Road Heavy Load	Grey	Green	Grey	Red	Brown
3.2/5 On-Road Light Load	Grey	Green	Grey	Green	Brown
3.2/5 On-Road Short Trip	Grey	Yellow	Grey	Brown	Yellow
2.0/2 Congestion	Grey	Green	Grey	Grey	Grey



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

Abatement of Oxides of Nitrogen (NO_x) is good or adequate in all tests. However, for carbon monoxide (CO) in particular, the Vitara scores poorly in the laboratory tests, but marginally better in the on-road tests. Particulate emissions are quite elevated in most of the tests. The cold ambient temperature test and the high-load highway test, especially, highlight the poor robustness of the system.

Energy Efficiency Tests



Laboratory Test

Energy

5.9/10 Cold Test



6.3/10 Warm Test



5.0/10 Cold Ambient Test



2.7/10 Highway



Consumption

Driving Range

Average

7.0 l/100 km

692 km

Worst-case

8.5 l/100 km

552 km



n.a.



good



adequate



marginal



weak
















poor

Comments

The Vitara is quite light and this helps it to achieve a very creditable Energy Efficiency Index of 4.9. Fuel efficiency is not exceptional for a car of this size and weight.

4.2 /10

Greenhouse Gases Tests

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
3.4/7	Cold Test			
3.7/7	Warm Test			
3.0/7	Cold Ambient Test			
1.7/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


The Vitara performs well in this part of the assessment. Methane (CH₄) emissions are well controlled and values of Nitrous Oxide (N₂O) are very low.

Our Verdict

The car tested here is the fourth generation Vitara and is equipped with the 1.0 litre direct-injection Boosterjet petrol engine, producing 82 kW. That small engine is made to work hard in some of Green NCAP's more demanding tests and this takes a toll on the car's performance. Even with a gasoline particulate filter (GPF), control of particulates is never exceptional. On the other hand, NO_x emissions are consistently low in all tests. Efficiency is unexceptional for a car of this low weight but greenhouse gas emissions are low, especially for 'laughing gas', N₂O.

Disclaimer

Publication Date 11 2020	Tested Car TSMLYD01S0066xxxx	Emissions Class Euro 6d-Temp	Tyres 215/55 R17 94V
Mass 1,121 kg	Engine Size 998 cc	Engine Power/Torque 82 kW/170 Nm	Published CO ₂ 139 g/km
	Battery Capacity n.a.	Published Driving Range n.a.	

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SEAT



2020

SEAT Ibiza

1.0 TGI CNG 4x2 manual



6.7 
/10

Clean Air
Index

5.7 
/10

Energy Efficiency
Index

4.5 
/10

Greenhouse Gas
Index



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
6.0/10 Cold Test					
6.2/10 Warm Test					
6.1/10 Cold Ambient Test					
7.2/10 Highway					



Road Test

6.4/10 On-Road Drive					
5.8/8 On-Road Heavy Load					
3.5/5 On-Road Light Load					
4.4/5 On-Road Short Trip					
2.0/2 Congestion					



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

The Ibiza has a small petrol tank but this is used only in an emergency, so the car was tested only in CNG mode. In general, the exhaust after-treatment works well, although particulate number (PN) would benefit from the fitment of a gasoline particulate filter (GPF).

Energy Efficiency Tests



Laboratory Test

Energy

6.4/10 Cold Test



6.6/10 Warm Test



5.5/10 Cold Ambient Test



4.5/10 Highway



Consumption

Driving Range

Average

4.0 kg/100 km

352 km

Worst-case

4.5 kg/100 km

304 km



n.a.



good



adequate



marginal



weak
















poor

Comments

The Ibiza is quite small and light and this is to its advantage in terms of energy efficiency. With an average consumption of 4.0 kg/100 km in the laboratory tests, rising to 4.5 kg/100 km in the high-load highway test, the car scores well in this part of the assessment, with an index of 5.7.

4.5 Greenhouse Gases Tests

/10

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
2.6/7	Cold Test			
4.1/7	Warm Test			
3.4/7	Cold Ambient Test			
2.7/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


The car shows good control of Nitrous Oxide (N₂O), especially in the cold ambient test. Emissions of other greenhouse gases are also kept quite low, to gain the car an index of 4.5 in this part of the assessment.

Our Verdict

There has been an Ibiza in SEAT's line-up since 1984 and, now in its fifth generation, it is tested here with a 1 litre engine running on compressed natural gas (CNG). The car has a small petrol tank but this is used only in emergencies and at start-up in very cold temperatures, so the tests were conducted only in CNG mode. The 66 kW engine struggled to keep up with some of Green NCAP's more demanding tests but, nevertheless, the car's emissions control stood up well to the challenge. Control of particulates was unexceptional, and would benefit from a gasoline particulate filter (GPF) but, on the whole, levels of other pollutant emissions and of greenhouse gases was commendable. The CNG power unit also provides reasonable fuel efficiency and, with balanced performance in all three areas of assessment, the Ibiza fully deserves its three-star rating.

Disclaimer

Publication Date 11 2020	Tested Car VSSZZKJZLR02 ^{xxxx}	Emissions Class Euro 6d-Temp	Tyres 215/45 R17
Mass 1,223 kg	Engine Size 999 cc	Engine Power/Torque 66 kW/160 Nm	Published CO ₂ 107 g/km
	Battery Capacity n.a.	Published Driving Range n.a.	

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RENAULT



2020

Renault ZOE

R110 ZE50 electric 4x2 automatic



10.0 
/10

Clean Air
Index

10.0 
/10

Energy Efficiency
Index

10.0 
/10

Greenhouse Gas
Index

10.0
/10



Clean Air Tests



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
10.0/10 Cold Test	●	●	●	●	●
10.0/10 Warm Test	●	●	●	●	●
10.0/10 Cold Ambient Test	●	●	●	●	●
10.0/10 Highway	●	●	●	●	●



Road Test

10.0/10 On-Road Drive	●	●	●	●	●
8.0/8 On-Road Heavy Load	●	●	●	●	●
5.0/5 On-Road Light Load	●	●	●	●	●
5.0/5 On-Road Short Trip	●	●	●	●	●
2.0/2 Congestion	●	●	●	●	●



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments





Pure electric cars emit no tailpipe emissions, and the ZOE scores maximum points in this part of the assessment.

Energy Efficiency Tests



Laboratory Test

Energy

10.0/10	Cold Test	 →	19.3 kWh/100 km
10.0/10	Warm Test	 →	17.9 kWh/100 km
10.0/10	Cold Ambient Test	 →	27.7 kWh/100 km
10.0/10	Highway	 →	29.8 kWh/100 km

Consumption

Driving Range

Average	22.3 kWh/100 km	319 km
Worst-case	29.8 kWh/100 km	227 km



n.a.



good



adequate



marginal
















weak



poor

Comments

Green NCAP does not currently take into account the carbon dioxide emitted in producing the electricity used to power electric vehicles. However, its measurement method does account for energy losses during charging and discharging i.e. it measures the actual amount of energy which is put into the car, rather than what is used by it. Even on this measure, the ZOE's efficiency remains above the point at which it would begin to lose points, and it scores maximum points in this part of the assessment.

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
7.0/7	Cold Test			
7.0/7	Warm Test			
7.0/7	Cold Ambient Test			
7.0/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


As with the Clean Air assessment, the ZOE scores full points here as it emits no gases at the tailpipe.

Our Verdict

The ZOE has been the best-selling all-electric vehicle in France since 2013. The car has had various motors and battery capacities in that time but here it is tested with the 80 kW, 52 kWh configuration. The car scores a maximum five stars and gets maximum points in all areas of assessment. In the WLTC cold test, the measured range closely matches the published value of 395 km but the average is lowered by some of the more demanding tests.

Disclaimer

Publication Date 11 2020	Tested Car VF1AG00086481xxx	Emissions Class Euro AX	Tyres 185/65/15 92T
Mass 1,502 kg	Engine Size n.a.	Engine Power/Torque 80 kW/225 Nm	Published CO ₂ 0 g/km
	Battery Capacity 52.0 kWh	Published Driving Range 395 km	

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RENAULT



2020

Renault Clio

TCe 100 petrol 4x2 manual



4.6
/10 

**Clean Air
Index**

6.9
/10 

**Energy Efficiency
Index**

5.0
/10 

**Greenhouse Gas
Index**

4.6
/10



Clean Air Tests



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
4.6/10 Cold Test	adequate	adequate	adequate	weak	poor
6.2/10 Warm Test	good	adequate	adequate	adequate	weak
0.0/10 Cold Ambient Test	poor	adequate	good	poor	poor
6.1/10 Highway	good	good	adequate	weak	weak



Road Test

5.2/10 On-Road Drive	n.a.	adequate	n.a.	adequate	weak
4.5/8 On-Road Heavy Load	n.a.	good	n.a.	good	weak
3.0/5 On-Road Light Load	n.a.	good	n.a.	good	weak
1.9/5 On-Road Short Trip	n.a.	adequate	n.a.	adequate	poor
1.0/2 Congestion	n.a.	good	n.a.	n.a.	n.a.



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

The tested car has a three-way catalyst but no gasoline particulate filter (GPF). Oxides of Nitrogen (NO_x) and ammonia (NH₃) are well controlled. However, carbon monoxide (CO) and particulate number (PN) present more of a problem, especially in the cold ambient temperature test.

Energy Efficiency Tests



Laboratory Test

Energy

7.4/10 Cold Test



8.0/10 Warm Test



6.6/10 Cold Ambient Test



5.8/10 Highway



Consumption

Driving Range

Average

5.5 l/100 km

770 km

Worst-case

6.4 l/100 km

659 km



n.a.



good



adequate



marginal
















weak



poor

Comments

The Clio is a small, light car and this benefits its energy efficiency. The car scores well in all of the laboratory tests, with a slight drop in the high-load highway test. But the performance overall lead to an index of 6.9 for this part of the assessment.

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
3.8/7	Cold Test			
4.2/7	Warm Test			
2.9/7	Cold Ambient Test			
3.3/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


Control of Methane (CH₄) is good in all tests and that of Nitrous Oxide (N₂O), an unregulated pollutant, is adequate. Overall performance leads to an index of 5.0 in this part of the assessment.

Our Verdict

The Clio has become one of Renault's iconic cars since the original was launched some thirty years ago. There have been five generations of the supermini in that time, the most recent, tested here, being released in 2019. Green NCAP's car was the TCe 100, with a 74 kW, one litre, three cylinder turbocharged petrol engine, complete with multi-port fuel injection. The test vehicle had no gasoline particulate filter and would have benefitted from having one, its generally good performance in Clean Air assessment being compromised by this pollutant. Green NCAP is informed by Renault that, since early November, Clios with this engine are equipped with a GPF. The score in Energy Efficiency is a good one and the car's control of greenhouse gases is to be commended. Overall, a balanced performance leads to a very creditable three-star rating.

Disclaimer

Publication Date 11 2020	Tested Car VF1RJA00X6312.xxx	Emissions Class Euro 6d-Temp	Tyres 205/45 R17 88H
Mass 1,143 kg	Engine Size 999 cc	Engine Power/Torque 74 kW/160 Nm	Published CO ₂ 118 g/km
	Battery Capacity n.a.	Published Driving Range n.a.	

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RENAULT



2020

Renault Captur

1.3 | TCe 130 petrol 4x2 manual



5.1 
/10

Clean Air
Index

5.3 
/10

Energy Efficiency
Index

4.7 
/10

Greenhouse Gas
Index



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
3.7/10 Cold Test	●	●	●	●	●
5.2/10 Warm Test	●	●	●	●	●
0.2/10 Cold Ambient Test	●	●	●	●	●
6.4/10 Highway	●	●	●	●	●



Road Test

6.3/10 On-Road Drive	●	●	●	●	●
5.7/8 On-Road Heavy Load	●	●	●	●	●
3.6/5 On-Road Light Load	●	●	●	●	●
4.0/5 On-Road Short Trip	●	●	●	●	●
1.0/2 Congestion	●	●	●	●	●



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

Control of Oxides of Nitrogen (NO_x) is good or adequate in all of the tests, including the severe cold ambient temperature and high-load highway tests. However, values of the unregulated pollutant ammonia, NH₃, is in general weak or poor. In the road tests, performance was generally good but control of particulate number was not as good as that of other pollutants.

Energy Efficiency Tests



Laboratory Test

Energy

5.9/10 Cold Test



6.4/10 Warm Test



5.1/10 Cold Ambient Test



4.1/10 Highway



Consumption

Driving Range

Average

6.6 l/100 km

731 km

Worst-case

7.6 l/100 km

632 km



n.a.



good



adequate



marginal
















weak



poor

Comments

With an average consumption of 6.6 l/100 km, the Captur performs well for energy efficiency and leads to a very creditable index of 5.3 in this part of the assessment.

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
3.5/7	Cold Test			
3.9/7	Warm Test			
3.0/7	Cold Ambient Test			
3.0/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


The Captur displays good control of Methane and of Nitrous Oxide (N₂O), a greenhouse gas that is not regulated by legislation. CO₂ is elevated in the cold ambient test and the high-load highway test but, in general, the vehicle performs well.

Our Verdict

A new Captur was launched in late 2019. The version tested here is the previous car, a facelifted version of the car originally released in 2013. The updated car has similar emissions control equipment and would be expected to show similar results to the test vehicle. The Captur scores an impressive three stars overall, with well-balanced performance in the three areas of assessment: control of pollutant emissions, energy efficiency and its limitation of greenhouse gases. A three-way catalyst and a gasoline particulate filter (GPF) contribute to robust performance all-round.

Disclaimer

Publication Date	Tested Car	Emissions Class	Tyres
11 2020	VF1R870086404 _{xxxx}	Euro 6d-Temp	205/55/R17 V XL
Mass	Engine Size	Engine Power/Torque	Published CO ₂
1,353 kg	1,332 cc	96 kW/240 Nm	147 g/km
	Battery Capacity	Published Driving Range	
	n.a.	n.a.	

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PEUGEOT



2020

Peugeot 3008

1.5 BlueHDI 130 diesel 4x2 automatic



4.3
/10 

Clean Air
Index

5.3
/10 

Energy Efficiency
Index

2.8
/10 

Greenhouse Gas
Index

4.3

/10



Clean Air Tests



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
5.6/10 Cold Test	●	●	●	●	●
6.9/10 Warm Test	●	●	●	●	●
0.0/10 Cold Ambient Test	●	●	●	●	●
0.0/10 Highway	●	●	●	●	●



Road Test

5.9/10 On-Road Drive	●	●	●	●	●
6.0/8 On-Road Heavy Load	●	●	●	●	●
2.7/5 On-Road Light Load	●	●	●	●	●
2.7/5 On-Road Short Trip	●	●	●	●	●
1.0/2 Congestion	●	●	●	●	●



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

The 3008 performs well in its mitigation of pollutant emissions, especially in the on-road tests. Particulate number is not excessive, thanks to the diesel particulate filter, but NO_x emissions are elevated in the two most demanding laboratory tests - cold ambient temperature and the high load highway test.

Energy Efficiency Tests



Laboratory Test

Energy

6.2/10 Cold Test



6.5/10 Warm Test



3.9/10 Cold Ambient Test



4.9/10 Highway



Consumption

Driving Range

Average

5.6 l/100 km

955 km

Worst-case

6.8 l/100 km

778 km



n.a.



good



adequate



marginal



weak
















poor

Comments

This is the area of assessment in which the 3008 scores best. A worst-case fuel consumption of 6.8 l/100 km is a good result for a vehicle of this size and weight.

Greenhouse Gases Tests

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
2.2/7	Cold Test			
1.5/7	Warm Test			
1.7/7	Cold Ambient Test			
2.6/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


Methane emissions are well controlled in all tests but points gained from this are lost by the high levels of 'laughing gas' (N₂O) which are emitted.

Our Verdict

The 3008 is Peugeot's compact crossover and this second-generation vehicle has been on sale since 2016. It is tested here with the 1.5 Hdi turbocharged engine, coupled to a diesel particulate filter (DPF) and with selective catalyst reduction. The car scores best in the area of Energy Efficiency, with an index of 5.3 in this part of the assessment, reflecting an economical engine. Pollutant emissions are generally not excessive, with good results for NO_x, CO and particulate number. An improvement in control of N₂O - 'laughing gas', an unregulated greenhouse gas - would increase the score in the Greenhouse Gas index and, almost certainly, increase the overall rating by half a star.

Disclaimer

Publication Date 11 2020	Tested Car VF3MICYHZRKS45xxxx	Emissions Class Euro 6d	Tyres 225/55 R18 102V
Mass 1,483 kg	Engine Size 1,499 cc	Engine Power/Torque 96 kW/300 Nm	Published CO ₂ 135 g/km
	Battery Capacity n.a.	Published Driving Range n.a.	

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PEUGEOT



2020

Peugeot 2008

1.2 PureTech 110 petrol 4x2 manual



5.3
/10 

Clean Air
Index

5.8
/10 

Energy Efficiency
Index

4.8
/10 

Greenhouse Gas
Index



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
4.8/10 Cold Test	adequate	adequate	marginal	marginal	weak
6.5/10 Warm Test	good	adequate	adequate	adequate	weak
2.2/10 Cold Ambient Test	weak	adequate	weak	weak	weak
5.0/10 Highway	good	good	weak	marginal	weak



Road Test

5.4/10 On-Road Drive	n.a.	good	n.a.	adequate	weak
4.6/8 On-Road Heavy Load	n.a.	good	n.a.	good	weak
3.3/5 On-Road Light Load	n.a.	good	n.a.	good	weak
4.0/5 On-Road Short Trip	n.a.	adequate	n.a.	marginal	adequate
2.0/2 Congestion	n.a.	good	n.a.	n.a.	n.a.



Robustness



n.a.



good



adequate



marginal



weak



poor

Comments

Oxides of Nitrogen (NO_x) are well controlled in all tests and emissions of non-Methane hydrocarbons are also generally low. Control of particulate number is generally weak, despite the gasoline particulate filter and is poor in some of the more demanding tests.

Energy Efficiency Tests



Laboratory Test

Energy

6.6/10 Cold Test



6.9/10 Warm Test



5.6/10 Cold Ambient Test



4.3/10 Highway



Consumption

Driving Range

Average

6.3 l/100 km

808 km

Worst-case

7.4 l/100 km

675 km



n.a.



good



adequate



marginal



weak



poor














Comments

The 2008 performs well in this part of the assessment, scoring well in the cold and warm tests and degrading only slightly in the more demanding cold ambient temperature test and the high-load highway assessment.

4.8

/10

Greenhouse Gases Tests

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
3.7/7	Cold Test			
4.0/7	Warm Test			
3.1/7	Cold Ambient Test			
2.7/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


The 2008 emits little Methane (CH₄) or Nitrous Oxide (N₂O), two very potent greenhouse gases. This trend is seen across all tests.

Our Verdict

The 2008 is a sub-compact crossover produced by Peugeot since 2013 and now in its second generation. An all-electric version of this popular car is expected soon but here it is tested with the 82 kW, 1.2 litre direct-injection petrol engine. The car impresses with a three-star overall rating and balanced performance across the three areas of assessment. Values of NO_x are low but so also are non-Methane hydrocarbons and, for the on-road tests especially, carbon monoxide. For a car with a small engine, robustness is quite good, performance degrading only a little in some of the more demanding tests but holding up well under high-load highway conditions.

Disclaimer

Publication Date 11 2020	Tested Car VF3CUHNP3KY20xxx	Emissions Class Euro 6d-Temp	Tyres 205/50 R17 89V
Mass 1,209 kg	Engine Size 1,199 cc	Engine Power/Torque 81 kW/205 Nm	Published CO ₂ 139 g/km
	Battery Capacity n.a.	Published Driving Range n.a.	

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PEUGEOT



2020

Peugeot 208

1.2 PureTech 100 petrol 4x2 manual



4.7 
/10

Clean Air
Index

6.2 
/10

Energy Efficiency
Index

5.1 
/10

Greenhouse Gas
Index

4.7
/10



Clean Air Tests



Laboratory Test

	NMHC	NO _x	NH ₃	CO	PN
4.1/10 Cold Test	Orange	Yellow	Brown	Red	Brown
5.9/10 Warm Test	Green	Green	Orange	Orange	Brown
0.0/10 Cold Ambient Test	Red	Yellow	Red	Red	Brown
6.1/10 Highway	Green	Green	Orange	Orange	Brown



Road Test

5.4/10 On-Road Drive	Grey	Green	Grey	Yellow	Brown
3.7/8 On-Road Heavy Load	Grey	Green	Grey	Red	Brown
2.3/5 On-Road Light Load	Grey	Orange	Grey	Green	Brown
3.9/5 On-Road Short Trip	Grey	Yellow	Grey	Orange	Yellow
2.0/2 Congestion	Grey	Green	Grey	Grey	Grey



Robustness



n.a.



good



adequate



marginal



weak







poor

Comments

The 208 demonstrates good control of oxides of Nitrogen (NO_x) in all tests. Unfortunately, the same cannot be said for particulates which are close to legislative limits (Green NCAP's limit) in most tests. Non-Methane hydrocarbons (NMHC) and carbon monoxide are high in the cold ambient temperature test, especially during engine warm-up. Nevertheless, the car scores well enough for other pollutants to achieve a Clean Air Index of 4.7.

Energy Efficiency Tests

 Laboratory Test Energy

7.1/10	Cold Test	
7.2/10	Warm Test	
4.7/10	Cold Ambient Test	
6.0/10	Highway	

Consumption Driving Range

Average	5.7 l/100 km	772 km
Worst-case	7.2 l/100 km	615 km



n.a.



good



adequate



marginal



weak
















poor

Comments

The 208 is a small, light car and this benefits its fuel efficiency. Average fuel consumption of 5.7 l/100 km in the laboratory tests is not overly impressive for a car of this type but adequate performance all-round leads to an index of 6.2 in this part of the assessment.

5.1 Greenhouse Gases Tests

/10

	<u>Greenhouse gases</u>	CO ₂	N ₂ O	CH ₄
3.9/7	Cold Test			
4.1/7	Warm Test			
2.8/7	Cold Ambient Test			
3.6/7	Highway			



n.a.



good



adequate



marginal



weak



poor

Comments


The 208 shows good or adequate control of Methane (CH₄) and of Nitrous Oxide (N₂O) in all tests. These are two very powerful greenhouse gases and this performance contributes to the index of 5.1.

Our Verdict

The 208 is Peugeot's offering in the supermini segment, first sold in 2012 and now, since 2019, in its second generation. The car tested here has a 74 kW three-cylinder 1.2 litre petrol engine, offering sprightly performance. Peugeot has done well to kerb emissions, with very respectable performance in each of Green NCAP's areas of assessment. In particular, Oxides of Nitrogen (NO_x) and Nitrous Oxide (N₂O) are well controlled but the car struggles to control carbon monoxide (CO) and particulates (PN) when cold. Nevertheless, a balanced all-round performance leads to a very creditable 3 star rating.

Disclaimer

Publication Date	Tested Car	Emissions Class	Tyres
11 2020	VR3UPHNKKT08 _{xxxx}	Euro 6d	195/55 R16
Mass	Engine Size	Engine Power/Torque	Published CO ₂
1,105 kg	1,199 cc	74 kW/205 Nm	124 g/km
	Battery Capacity	Published Driving Range	
	n.a.	n.a.	

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