



2019

Audi A4 Avant g-tron

CNG automatic



8.7 
/10

Clean Air
Index

4.7 
/10

Energy Efficiency
Index

 <u>Laboratory test</u>		HC	CO	NO _x	PN
8.0/9	Cold Test*				
2.9/3	Warm Test#				
2.8/3	Eco Mode#				
2.9/3	Sport Mode#				
7.0/9	Highway#				
 <u>Road test</u>					
6.4/7	On-Road Drive*				
 <u>Robustness</u>					

* Adapted regulatory test # Additional Green NCAP tests



n.a.



good



adequate



marginal



weak



poor

Comments

A Clean Air index of 8.7 is a creditable achievement for a Euro 6b-compliant car. However, control of carbon monoxide emissions and of hydrocarbons in the high-load test, could be improved.

Energy Efficiency Tests



Laboratory test

Energy

5.7/10 Cold Test*



1.9/3 Warm Test#



1.9/3 Eco Mode#



1.7/3 Sport Mode#



5.0/10 Highway#



Consumption

Fuel

Average consumption

4.6 kg/100 km

Worst-case consumption

5.0 kg/100 km

* Adapted regulatory test # Additional Green NCAP tests



n.a.



good



adequate



marginal



weak



poor

Comments

The car's overall star rating is determined by its marginal energy efficiency, with performance in eco-mode no better than in standard drive-mode.

Additional Information

Greenhouse Gases **

CO₂

Cold Test*



Warm Test#



Eco Mode#



Sport Mode#



Highway#



* Adapted regulatory test # Additional Green NCAP tests

** For indication only. The assessment of greenhouse gases does not currently form part of the rating.



n.a.



good



adequate



marginal



weak



poor

Our verdict

The Audi A4 Avant is tested here as the 'g-tron', the CNG (compressed natural gas)-powered variant of the model range. The g-tron's declared CO₂ value of 111 g/km is significantly lower than its purely petrol-engined siblings. The car tested was compliant with Euro 6b emissions legislation and has no particulate filter. Such cars can still currently be sold in the EU but must soon be upgraded to meet Euro 6d-temp requirements. Green NCAP will test the updated car as soon as it becomes available. While the car operates almost exclusively on CNG, it also has a small 'emergency' petrol reserve, to get it to the nearest gas station. The car was tested in both CNG and petrol modes, the CNG results primarily defining the score and star rating, but with penalties if the performance on petrol was significantly worse. In most of the laboratory tests, control of pollutant emissions was good or adequate, except for carbon monoxide, control of which was marginal. The high-load highway test did not affect the rating of this pollutant, but emissions of unburnt hydrocarbons was noticeably worse than in the other tests, and was rated as weak. In the cold test, particulate emissions were very high when tested on the emergency petrol reserve. Energy efficiency was marginal for all tests, with similar values for the car in standard drive mode and in eco-mode, but noticeably worse in sports mode and in the high load test. All in all, the A4 g-tron performs adequately but should do better when its engine and exhaust after-treatment are upgraded to the latest emissions requirements.

Year of Publication

2019

Tested Car

WAUZZZF43JA179591

Emissions Class

Euro 6b

Mass

1,702 kg

Engine Size

1,984 cc

Engine Power/Torque

125 kW/270 Nm

Tyres

245/35 R19

Published CO₂

111 g/km



Think before you print



Mercedes-Benz



2019

Mercedes-Benz C-Class

C220d 4Matic diesel automatic



10.0 
/10

Clean Air
Index

5.3 
/10

Energy Efficiency
Index

Clean Air Tests



Laboratory test

	HC	CO	NO _x	PN
9.0/9 Cold Test*				
3.0/3 Warm Test#				
3.0/3 Eco Mode#				
3.0/3 Sport Mode#				
9.0/9 Highway#				



Road test

7.0/7 On-Road Drive*				
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Robustness

* Adapted regulatory test # Additional Green NCAP tests



n.a.



good



adequate



marginal



weak



poor

Comments

The C220d performs exceptionally well, with very low values of pollutant emissions in all tests. The car scores maximum points for the Clean Air Index, the first non-electric vehicle tested by Green NCAP to do so.

Energy Efficiency Tests



Laboratory test

Energy

6.6/10 Cold Test*



2.3/3 Warm Test#



2.3/3 Eco Mode#



2.2/3 Sport Mode#



4.7/10 Highway#



Consumption

Fuel

Average consumption

5.7 l/100 km

Worst-case consumption

6.8 l/100 km

* Adapted regulatory test # Additional Green NCAP tests



n.a.



good



adequate



marginal



weak



poor

Comments

Performance in most tests is adequate. In the cold test and the high-load highway test, energy efficiency is marginal, and it is the latter that the maximum fuel consumption of 6.8 l/100 km is recorded, still a creditable result for a large family car with a diesel engine.

Additional Information

Greenhouse Gases **

CO₂

Cold Test*



Warm Test#



Eco Mode#



Sport Mode#



Highway#



* Adapted regulatory test # Additional Green NCAP tests

** For indication only. The assessment of greenhouse gases does not currently form part of the rating.



n.a.



good



adequate



marginal



weak



poor

Our verdict

Mercedes-Benz's fourth generation C-Class, tested here with as the C220d, puts paid to the notion that diesel engines are necessarily dirty. With selective catalyst reduction and a diesel particulate filter, the C220d delivers exceptionally good results for low pollutant emissions and becomes the first non-electric vehicle tested by Green NCAP to achieve a full score in the Clean Air index. With good performance in all of the lab and on-road tests, the results show that, with careful calibration and effective after-treatment, diesel engine cars can deliver extremely low emissions.

Year of Publication

2019

Tested Car

WDD2050151F893657

Emissions Class

Euro 6d-temp

Mass

1,655 kg

Engine Size

1,950 cc

Engine Power/Torque

143 kW/400 Nm

Tyres

225/50 R17

Published CO₂

168 g/km



Think before you print



2019

Nissan LEAF

40 kWh N-CONNECTA electric automatic



10.0 
/10

Clean Air
Index

8.5 
/10

Energy Efficiency
Index

Clean Air Tests

 <u>Laboratory test</u>		HC	CO	NO _x	PN
9.0/9	Cold Test*				
3.0/3	Warm Test#				
3.0/3	Eco Mode#				
3.0/3	Sport Mode#				
9.0/9	Highway#				
 <u>Road test</u>					
7.0/7	On-Road Drive*				
 <u>Robustness</u>					

* Adapted regulatory test # Additional Green NCAP tests



Comments

The Leaf produces no pollutant or greenhouse gases as it burns no fuel. Accordingly, its declared CO2 value is zero.



Laboratory test

Energy

10/10	Cold Test*		→	17.1 kWh /100 km
3/3	Warm Test#		→	15.4 kWh /100 km
3/3	Eco Mode#		→	15.2 kWh /100 km
3/3	Sport Mode#		→	15.4 kWh /100 km
/10	Highway#		→	22.9 kWh /100 km

Consumption

Electrical energy

Average consumption

17.2 kWh/100 km

Worst-case consumption

22.9 kWh/100 km

* Adapted regulatory test # Additional Green NCAP tests



n.a.



good



adequate



marginal



weak



poor

Comments

The Leaf, like other electric vehicles, scores highly in Green NCAP's test of energy efficiency.

Additional Information

Greenhouse Gases **

CO₂

Cold Test*



Warm Test#



Eco Mode#



Sport Mode#



Highway#



* Adapted regulatory test # Additional Green NCAP tests

** For indication only. The assessment of greenhouse gases does not currently form part of the rating.



n.a.



good



adequate



marginal



weak



poor

Our verdict

The second-generation Nissan Leaf, introduced in 2017, is a pure electric vehicle, powered by a 40 kW/h battery. As with all electric cars, the Leaf scores maximum points for Clean Air, as it does not burn any fuel and does not produce any gaseous emissions. The car has an eco-mode but, in Green NCAP's tests, this had no noticeable decrease in energy consumption over the standard setting. Energy consumption increased significantly in the high-load highway test but was still well within Green NCAP's lower limits. The Leaf's average and maximum energy consumption both exceed that of the similarly sized Hyundai Ioniq, tested by Green NCAP earlier in 2019. The Leaf is offered with e-pedal as an option. This pedal acts both as an accelerator and brake.

Year of Publication

2019

Tested Car

SJNFAAZE1U0032811

Emissions Class

Euro 6d-temp

Mass

1,580 kg

Engine Size

n.a.

Engine Power/Torque

110 kW/340 Nm

Tyres

215/50R17

Published CO₂

0 g/km



Think before you print



2019

Opel/Vauxhall Corsa

1.0l petrol manual



9.0 
/10

Clean Air
Index

6.0 
/10

Energy Efficiency
Index

 <u>Laboratory test</u>		HC	CO	NO _x	PN
7.0/9	Cold Test*				
3.0/3	Warm Test#				
3.0/3	Eco Mode#				
3.0/3	Sport Mode#				
8.0/9	Highway#				
 <u>Road test</u>					
7.0/7	On-Road Drive*				
 <u>Robustness</u>					

* Adapted regulatory test # Additional Green NCAP tests



Comments

Control of pollutant emissions is generally good or adequate and the score in this part of the assessment reflects this strong performance. In the cold test, control of particulate number is marginal and, in the high-load highway test, that of carbon monoxide is weak.



Laboratory test

Energy

8.2/10 Cold Test*



2.4/3 Warm Test#



2.4/3 Eco Mode#



2.4/3 Sport Mode#



5.1/10 Highway#



Consumption

Fuel

Average consumption

6.1 l/100 km

Worst-case consumption

7.4 l/100 km

* Adapted regulatory test # Additional Green NCAP tests



n.a.



good



adequate



marginal



weak



poor

Comments

The Corsa's 66kW engine demonstrates adequate efficiency in most tests but is marginal in the high-load highway test.

Additional Information

Greenhouse Gases **

CO₂

Cold Test*



Warm Test#



Eco Mode#



Sport Mode#



Highway#



* Adapted regulatory test # Additional Green NCAP tests

** For indication only. The assessment of greenhouse gases does not currently form part of the rating.



n.a.



good



adequate



marginal



weak



poor

Our verdict

The iconic Opel/Vauxhall Corsa is due to be replaced later this year with a Peugeot-Citroën derived model. The car tested here is the fifth-generation Corsa E, developed under GM. With a one-litre 66 kW engine, and meeting Euro 6d-temp regulations, the car performed very well for Clean Air, with generally low pollutant emissions. After-treatment includes a three-way catalyst and gasoline particulate filter, which work well to keep emissions well controlled.

Energy efficiency is also generally good, and just above the four-star threshold. In the high-load highway test, efficiency is marginal, and it is here that the maximum fuel consumption of 7.4 l/100 km is recorded.

Four stars is a creditable result for a petrol-engined vehicle, and the Corsa performs especially well in its control of pollutant emissions.

Year of Publication

2019

Tested Car

W0V0XEP08A6025405

Emissions Class

Euro 6d-temp

Mass

1,163 kg

Engine Size

999 cc

Engine Power/Torque

66 kW/169 Nm

Tyres

195/55R16

Published CO₂

138 g/km



Think before you print



RENAULT



2019

Renault Scenic

Blue dCi 150 4x2 diesel manual



8.6 
/10

Clean Air
Index

5.9 
/10

Energy Efficiency
Index

 <u>Laboratory test</u>	HC	CO	NO _x	PN
9.0/9 Cold Test*				
3.0/3 Warm Test#				
3.0/3 Eco Mode#				
3.0/3 Sport Mode#				
4.0/9 Highway#				
 <u>Road test</u>				
7.0/7 On-Road Drive*				
 <u>Robustness</u>				

* Adapted regulatory test # Additional Green NCAP tests



Comments

The Scenic performs well for its low emissions of pollutant gases in all tests. Only in the high-load highway test does it perform poorly, for NO_x.

Energy Efficiency Tests



Laboratory test

Energy

7.8/10 Cold Test*



2.5/3 Warm Test#



2.4/3 Eco Mode#



2.5/3 Sport Mode#



5.1/10 Highway#



Consumption

Fuel

Average consumption

5.3 l/100 km

Worst-case consumption

6.6 l/100 km

* Adapted regulatory test # Additional Green NCAP tests



n.a.



good



adequate



marginal



weak



poor

Comments

Energy efficiency is generally adequate, with a marginal result in the high-load highway test.

Additional Information

Greenhouse Gases **

CO₂

Cold Test*



Warm Test#



Eco Mode#



Sport Mode#



Highway#



* Adapted regulatory test # Additional Green NCAP tests

** For indication only. The assessment of greenhouse gases does not currently form part of the rating.



n.a.



good



adequate



marginal



weak



poor

Our verdict

The Renault Scenic, one of the earliest multi-purpose vehicles, is tested here in its fourth-generation form, with a 110 kW common-rail diesel. Selective catalyst reduction and a diesel particulate filter contribute to very good abatement of pollutant emissions, and good results in almost all tests. Only in the high-load highway test does the car perform poorly, with high emissions of oxides of nitrogen. Nevertheless, an index of 8.6 for Clean Air is a very creditable achievement. For energy efficiency, the Scenic scores 5.9 out of 10, just below the 6.0 threshold which would have given the car four stars overall. Efficiency is adequate in all tests except the high-load one, where it is marginal. Overall, the Scenic impresses with its control of pollutant emissions and is unlucky to miss out on a four-star rating by such a small margin.

Year of Publication
2019

Tested Car
VF1RFA00761659285

Emissions Class
Euro 6d-temp

Mass
1,637 kg

Engine Size
1,750 cc

Engine Power/Torque
110 kW/320 Nm

Tyres
195/55 R20

Published CO₂
145 g/km



Think before you print