



Mercedes-Benz



2023

Mercedes-Benz E-Class

300d 4MATIC diesel AWD automatic



9.3 
/10

Clean Air
Index

4.0 
/10

Energy Efficiency
Index

1.9 
/10

Greenhouse Gas
Index



Laboratory Test

NMHC

NO_x

NH₃

CO

PN

9.3/10 Cold Test



9.6/10 Warm Test



8.8/10 Highway



Cold Ambient Test

Does not qualify for additional robustness testing



Road Test

9.8/10 On-Road Drive



4.5/5 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

Pollutant control in the diesel E-Class is exceptional and demonstrates some results never seen before. The vehicle collects almost all points in every test and keeps emissions at a minimum level even in the Highway Test, where many competitors struggle. NO_x emissions – typically a challenge for diesel powertrains – are practically non-existent, and only in the Short Trip are there some after a cold engine start. Another astonishing achievement lies in the particle control, as the test results come close to, or are even below, Green NCAP's very stringent lower thresholds.

Energy Efficiency Tests



Laboratory Test

Energy

4.5/10 Cold Test



5.2/10 Warm Test



2.4/10 Highway



Cold Ambient Test

Does not qualify for additional robustness testing

Consumption

Driving Range

Average

6.3 l/100 km

1,064 km

Worst-case

7.5 l/100 km

884 km



n.a.



good



adequate



marginal



weak



poor

Comments

The E300d requires less than six litres of diesel fuel for 100 km in the standard Cold and Warm Lab Tests, as well as in the On-road Drive. These figures are even below the officially declared WLTP value of 6.5 l/100 km. The Short Urban Trip is measured to consume slightly more than 7 l/100 km, whereas performing the dynamic Highway cycle needs 7.5 l/100 km.

The values are creditable for a vehicle of this type, power and mass.

1.9



/10

Greenhouse Gases Tests



Greenhouse gases

CO₂

N₂O

CH₄

2.5/10 Cold Test



3.4/10 Warm Test



0.0/10 Highway



Cold Ambient Test

Does not qualify for additional robustness testing



n.a.



good



adequate



marginal



weak



poor

Comments

This is the most challenging category for the E300d. Good methane (CH₄) emissions control earns the car the maximum bonus points, but – typically for diesel powertrains – the car emits N₂O above Green NCAP's threshold and the E300d loses 1.5 test points. CO₂ is around 145-155 g/km at the tailpipe in both WLTC+ Lab Tests and rises to 194 g/km during the more challenging Highway Test. The addition of the emissions related to diesel production and supply (ca. 30 g CO₂-eq./km) reduces further the Mercedes's score in this part of the assessment.

Our Verdict

The Mercedes-Benz E300d tested here is a station wagon with a two-litre diesel engine, providing 210 kW peak power and 550 Nm of torque. The empty weight of the luxurious vehicle is 2,077 kg. The car takes every advantage of the efficiency of its diesel powertrain, which is supported by a 48 V mild-hybrid system. Consumption values below 6 l/100 km are realistic. Nevertheless, the consumption figures are not low enough to help the Mercedes get more than 1.9 points in the Greenhouse Gas Index. The truly astonishing achievement of Mercedes' engineers is visible in the Clean Air Index: with 9.3 points out of 10, the diesel E-Class becomes the cleanest combustion-engined vehicle Green NCAP has tested so far. The E-Class maintains control over the pollutants in all tests, while minimising both NO_x and particle number to extreme levels. Overall, the E300d earns an Average Score of 50% and 3 Green Stars.

Disclaimer [↗](#)

Specification

Tested Car

W1K2132191B02XXXX

Publication Date	Vehicle Class	Tyres	Emissions Class
09 2023	Executive Car	245/35 275/30R20	Euro 6d AP
Mass	Engine Size	Power/Torque	Declared CO ₂
2,077 kg	1,993 cc	210 kW/550 Nm	170 g/km
Declared Battery Capacity	Declared Driving Range	Declared Consumption	
n.a.	n.a.	6.5 l/100 km	

Heating Concept

Waste heat



Think before you print