



2022

NIO eT7

480 kW electric AWD automatic



10.0 
/10

Clean Air
Index

9.4 
/10

Energy Efficiency
Index

9.6 
/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 Highway	●	●	●	●	●
10.0/10 Cold Ambient Test	●	●	●	●	●



Road Test

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



n.a.



good



adequate



marginal



weak



poor

Comments





NIO only produces battery electric vehicles. Accordingly, the tested eT7 scores the maximum index of 10 in this part of the assessment as it doesn't emit any polluting exhaust gases.

Energy Efficiency Tests



Laboratory Test

Energy

10.0/10	Cold Test		→	17.7 kWh/100 km
10.0/10	Warm Test		→	16.9 kWh/100 km
9.2/10	Highway		→	25.4 kWh/100 km
8.5/10	Cold Ambient Test		→	30.4 kWh/100 km

Consumption

Driving Range

Average	20.0 kWh/100 km	530 km
Worst-case	30.4 kWh/100 km	337 km



n.a.



good



adequate



marginal



weak



poor

Comments

The e77 convinces with low electricity consumption in both the cold and warm WLTC+ tests. The dynamic drive in the Highway Test requires more – 25.4 kWh/100 km – but still below the lower rating threshold thanks to low aerodynamic drag. As is typical for electric vehicles, the Cold Ambient Test presents the biggest challenge due to high cabin heating demand. Here, the NIO shows 72% higher consumption than in the standard WLTC+ case. In the real world On-Road Drive test, a consumption of 18.8 kWh/100 km and a range of about 545 km can be expected.

9.6 Greenhouse Gases Tests

/10



Greenhouse gases

CO₂

N₂O

CH₄

10.0/10 Cold Test



10.0/10 Warm Test



9.8/10 Highway



9.0/10 Cold Ambient Test



n.a.



good



adequate



marginal



weak



poor

Comments

The Greenhouse Gas (GHG) Index is based on a Well-to-Wheel+ approach, meaning that the GHG emissions related to the supply of energy are added to those of the tailpipe. The vehicle's production is not yet included in the assessment due to the implicit limitations of generic data about global supply chains. Since the NIO eT7 is a purely electric car, its GHG emissions originate only from the upstream processes of electricity supply – ca. 48–86 g CO₂-eq./km. Thanks to its low energy consumption and the relatively low GHG emissions of EU electricity production, the eT7 scores a very high 9.6/10.

Our Verdict

NIO is a relative newcomer to the European market and makes a strong statement with its fully-equipped eT7. The car comes with two motors and all-wheel-drive, a formidable power output of 480 kW and a huge 100 kWh battery (a 75 kWh variant is also offered). But this all adds weight, and the NIO tips the scales at 2.4 tons. In the laboratory WLTC+ test, the eT7 exactly matched its declared range. The battery capacity test is performed with 11 kW AC charging and the determined available capacity is 92.5 kWh. This value is below the officially promoted figure, but this is compensated by slightly lower consumption than what is declared. The measured charging/discharging efficiency from the charging socket to battery output is 90%.

Despite its high mass, the eT7 demonstrates high overall efficiency. Under cold winter conditions (WLTC+ test at -7°C), however, the consumption is increased by 72% and this significantly reduces the driving range. The initial cabin heating needs a lot of energy and improving the climatization management requires a special effort by electric vehicle manufacturers in principle.

The absence of polluting exhaust gas emissions, the high energy efficiency and the relatively low greenhouse gas emissions of European average electricity production grant the NIO eT7 an impressive Weighted Overall Index of 9.6 out of 10 and a well-deserved 5 Green stars.

Disclaimer

Specifications

Publication Date 11 2022	Tested Car LJ1EFAUU0NG06xxxx	Tyres 245/45R20	Emissions Class Euro 6 AX
Mass 2,379 kg	Engine Size n.a.	System Power/Torque 480 kW/850 Nm	Declared CO ₂ n.a.
Declared Battery Capacity 100.0 kWh	Declared Driving Range Overall 580 km City 660 km	Declared Consumption 19 kWh/100 km	



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