



2022

Tesla Model 3

Standard Range Plus electric RWD automatic



10.0 
/10

Clean Air
Index

9.6 
/10

Energy Efficiency
Index

9.8 
/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


Tesla only produces battery electric vehicles. Accordingly, Model 3 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		→	16.5 kWh/100 km
10.0/10	Warm Test		→	15.9 kWh/100 km
9.8/10	Highway		→	21.1 kWh/100 km
8.8/10	Cold Ambient Test		→	28.5 kWh/100 km

Consumption

Driving Range

Average	17.9 kWh/100 km	390 km
Worst-case	28.5 kWh/100 km	241 km



n.a.



good



adequate



marginal



weak



poor

Comments

Model 3 impresses with a very high energy efficiency, not only in the Cold and Warm WLTC+ laboratory tests but also in the challenging Highway Test. Here, the small frontal area and the aerodynamic shape work to the vehicle's advantage. At a wintery -7°C, however, consumption increases by 72% and the driving range is reduced to 241km. In "normal" real world driving, figures below 16 kWh/100 km and ranges of up to 450 km can be expected. The measured charging/discharging efficiency from the charging socket to battery output is 89%, using GreenNCAP's method of 11kW AC charging.

9.8

/10

Greenhouse Gases Tests



Greenhouse gases

CO₂

N₂O

CH₄

10.0/10 Cold Test



10.0/10 Warm Test



10.0/10 Highway



9.3/10 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 Model 3 is a purely electric car, its assessed GHG emissions originate only from the upstream processes of electricity supply – ca. 45–80 g CO₂-eq./km. Thanks to its low energy consumption and the relatively low GHG of EU electricity production, the Tesla scores a very high 9.8/10.

Our Verdict

Tested here is Tesla Model 3 with a declared battery capacity of 60kWh, single motor and rear wheel drive. With its power of 208kW it attracts a young and sporty audience. Despite its relatively high mass – typical for electric vehicles – Model 3 demonstrates very low energy consumption figures and proves it has been designed with a special focus on efficiency and driving range. Indeed, in the Highway Test, the small Tesla gets the highest score of all GreenNCAP tested vehicles so far, with a very impressive 21.1kWh/100km. Under cold winter conditions (WLTC+ test at -7°C), however, the consumption is increased by 72% and this limits the driving range significantly due to high demand for cabin heating and battery protection management strategies. The measured usable battery capacity of 61kWh meets the declared value and allows a range of ca. 450 km under standard real-world conditions and moderate climatization demand.

Higher energy efficiency in cold weather conditions and further reduction of charging losses (tests consider 11kW AC charging), would help the vehicle boost its sustainability result even more.

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 Tesla an impressive Weighted Overall Index of 9.8 out of 10 and a well-deserved 5 Green stars.

Disclaimer [↗](#)

Specifications

Publication Date 11 2022	Tested Car LRW3E7FR0NC56xxxx	Tyres 235/45 R18	Emissions Class Euro 6 AX
Mass 1,760 kg	Engine Size n.a.	System Power/Torque 208 kW/353 Nm	Declared CO ₂ n.a.
Declared Battery Capacity 60.0 kWh	Declared Driving Range Overall 491km City 603km	Declared Consumption 14.4 kWh/100 km	



Think before you print