



2021

# VW Golf

GTE 180 kW plug-in hybrid 4x2 automatic



6.2   
/10

Clean Air  
Index

6.2   
/10

Energy Efficiency  
Index

5.6   
/10

Greenhouse Gas  
Index



## Laboratory Test

	NMHC	NO <sub>x</sub>	NH <sub>3</sub>	CO	PN
<b>5.6/10</b> Cold Test					
<b>6.5/10</b> Warm Test					
<b>4.0/10</b> Cold Ambient Test					
<b>4.0/10</b> Highway					



## Road Test

<b>4.8/10</b> On-Road Drive					
<b>5.2/8</b> On-Road Heavy Load					
<b>3.5/5</b> On-Road Light Load					
<b>4.1/5</b> On-Road Short Trip					
<b>2.0/2</b> Congestion					



## Robustness



n.a.



good



adequate



marginal



weak



poor

### Comments

The Golf GTE demonstrates robust control of its non-methane hydrocarbon and nitrogen oxides emissions but is let down by the high ammonia (NH<sub>3</sub>) output. While a reduction of CO emissions would be beneficial, it is the particle number where improvement is most needed. The phases of electric mode driving generally reduce the total pollutant output but, in some cases, sudden combustion engine start in response to a high-power demand can deteriorate the emissions behaviour. However, overall, the Golf GTE is awarded 6.2 points for its control of pollutant emissions.

# Energy Efficiency Tests



## Laboratory Test

### Energy

5.6/10	Cold Test		→	11.7 kWh/100 km
6.8/10	Warm Test			
2.6/10	Cold Ambient Test			
3.1/10	Highway			

### Consumption

### Driving Range

	Petrol	Electric		Petrol	Electric	
Average	5.2 l	4.9 kWh /100 km		588	42	km
Worst-case	8.6 l	n.a. /100 km		465	n.a.	km

Consumption in electric mode: 11.7 kWh/100 km electric + 3.0 l/100 km fuel



n.a.



good



adequate



marginal



weak



poor

### Comments

For Plug-In Hybrid Electric Vehicles, Green NCAP's rating system considers a weighing factor between tests starting with a fully charged and those starting with an empty battery.

The Energy Efficiency Index benefits from the GTE's ability to drive longer distances in full electric mode but, in conventional petrol engine mode, the consumption decreases the overall performance. The total score of 6.2 in this part of the assessment is very creditable for a car with such high system power and a relatively high weight for its body type, and is a consequence of an intelligent energy distribution between both power sources.

# 5.6 Greenhouse Gases Tests

/10

	<u>Greenhouse gases</u>	CO <sub>2</sub>	N <sub>2</sub> O	CH <sub>4</sub>
4.2/7	Cold Test			
3.8/7	Warm Test			
2.3/7	Cold Ambient Test			
2.3/7	Highway			



n.a.



good



adequate



marginal



weak



poor

### Comments

Though the electric side of the powertrain helps reduce the local tailpipe CO<sub>2</sub> emissions, the high output of the petrol engine limits the score. Nevertheless, the hybrid Golf GTE still receives a commendable result of 5.6 in the Greenhouse gas assessment, which is supported by the excellent management of the other rated greenhouse compounds.

## Our Verdict

The new Volkswagen Golf GTE is a plug-in hybrid of a very dynamic character with a system power of 180 kW and 400 Nm of torque. It comes as a combination of a 110 kW 1.4 litre turbocharged direct injection petrol engine, a 6-speed double-clutch transmission, an 85 kW electric motor and a battery of 13 kWh declared capacity. All these components add to a relatively high weight but help the vehicle score well in all three parts of Green NCAP's assessment. Despite being equipped with a gasoline particle filter, particle number emissions are still not as low as they could be, and ammonia is another compound that would benefit from attention. The hybrid management makes effective use of the power sources and combines them well enough to achieve low consumption values and moderate CO<sub>2</sub> emissions without compromising agility. Regular charging will provide the greatest benefit from the plug-in hybrid architecture. Overall, the GTE is awarded a very creditable result of 3½ green stars and proves the potential of well-developed alternative powertrains.

## Disclaimer

Publication Date 11 2021	Tested Car WVWZZZCDZMW31xxxx	Emissions Class Euro 6d	Tyres 225/45 R17 91W
Mass 1,583 kg	Engine Size 1,395 cc	Engine Power/Torque 180 kW/400 Nm	Published CO <sub>2</sub> 36 g/km
Declared Battery Capacity 13.0 kWh	Published Driving Range 52 km		



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