Mercedes-EQ EQE 350+

AMG-LINE ELECTRIC RWD AUTOMATIC

Sustainability Rating

2025 | ★★★★☆ | 70%

Clean Air
7.8 /10

Energy Efficiency
5.8 /10

Greenhouse Gases
7.6 /10

Driving Experience

Consumption & Range
ADEQUATE

Cold Winter Performance
GOOD

Charging Capability
ADEQUATE

Our verdict

Tested here is the Mercedes-EQ EQE 350+. This is a large and luxurious premium class electric vehicle with an empty mass of 2.5 tonnes and a long driving range thanks to the big 101 kWh battery. Correspondingly, these figures greatly impact the vehicles' lifecycle emissions and energy demand. However, the EQE is known to be equipped with an efficient powertrain, which in combination with the aerodynamic and low frontal surface body shape enables surprisingly low consumption values for a car of this type. Still, the Mercedes-EQ does not compromise on thermal comfort in cold weather conditions and this comes at the cost of additional energy demand, which is well seen in the measured results. The car is awarded a credible total of 4 Green stars.

- The EQE has no exhaust emissions and excellent brake abrasion performance due to very high recuperation braking shares, but tyre abrasion and production-related pollutants reduce its air quality score.
- Despite high production energy needs, the EQE achieves above-average energy efficiency thanks to a well-optimized powertrain and moderate consumption in demanding tests.
- With no tailpipe CO_2 emissions and European production, the EQE scores well in greenhouse gas performance, with total lifecycle emissions of 156 g CO_2-eq./km.

Disclaimer

Think before you print

Clean Air

7.8 /10

Comments

The electric powertrain does not have any exhaust emissions. The tyre abrasion assessment is negatively impacted by the high mass, the rear axle toe settings and the aggressive accelerator pedal response. However, the results for brake abrasion are significantly better as the car impresses with an extraordinarily high share of recuperation braking and thus largely reduces the use of the friction brakes. The pollutant emissions related to the production of a vehicle and battery of these masses, as well as those originating from the electricity supply processes, lower the achievement in this index.

Exhaust emissions

Exhaust pollutant emissions are produced from combustion engines. Although current emission legislation is very strict, this type of emission directly affects air quality, and not all vehicles perform equally well. Read more

GOOD ● **10.0** /10

In laboratory

Green NCAP performs a wide range of tests on cars in the laboratory. This is the best way to ensure controlled conditions and guarantee that all cars are tested in the same way, making their results comparable. Read more

GOOD ● **10.0** /10

	NMHC	NO_x	NH_3	CO	PN	PM	Score
Legal test (WLTP)	●	●	●	●	●	●	8.0 /8
Warm weather	●	●	●	●	●	●	10.0 /10
Highway	●	●	●	●	●	●	10.0 /10
Winter cold start	●	●	●	●	●	●	10.0 /10
Winter warm start	●	●	●	●	●	●	10.0 /10

On road

An on-road driving test , using portable emissions measuring equipment complements Green NCAP's laboratory tests. Read more

GOOD ● **10.0** /10

	NMHC	NO_x	NH_3	CO	PN	PM	Score
Real-world mixed drive	●	●	●	●	●	●	10.0 /10
Short city trip	●	●	●	●	●	●	10.0 /10
Congestion	●	●	●	●	●	●	2.0 /2

● good ● adequate ● marginal ● weak ● poor ● not applicable

Clean Air

7.8 /10

Non-exhaust emissions

Driving a vehicle also produces emissions different from those of the exhaust pipe. Green NCAP evaluates vehicle properties that contribute to tyre and brake abrasion.

MARGINAL

4.2/10

Tyre wear

Tyre abrasion releases small particles during driving, and some vehicle properties have major impact on it. Heavier vehicles, wheel alignment causing increased slip angle, and aggressive acceleration responses all increase tyre wear and particle emissions. Read more

WEAK

0.5/6

	Result	Score
Influence of mass		0.0/3
Wheel alignment		0.5/1
Accelerator response		0.0/2

Brake wear

Brake dust, produced by friction brakes, can be mitigated through filters, enclosed brake systems (like drums), or by reducing friction brake use with regenerative braking in electrified vehicles. Containment keeps dust inside the system, while recuperation lowers brake wear. However, heavier vehicles still generate more brake abrasion due to their greater stopping demands. Read more

ADEQUATE

4.5/6

	Result	Score
Brake dust mitigaton		0.0/4
Brake dust containment		0.0/6
Recuperative braking - warm test		4.5/6

good adequate marginal weak poor not applicable

Clean Air

7.8 /10

Additional Life Cycle Assessment information

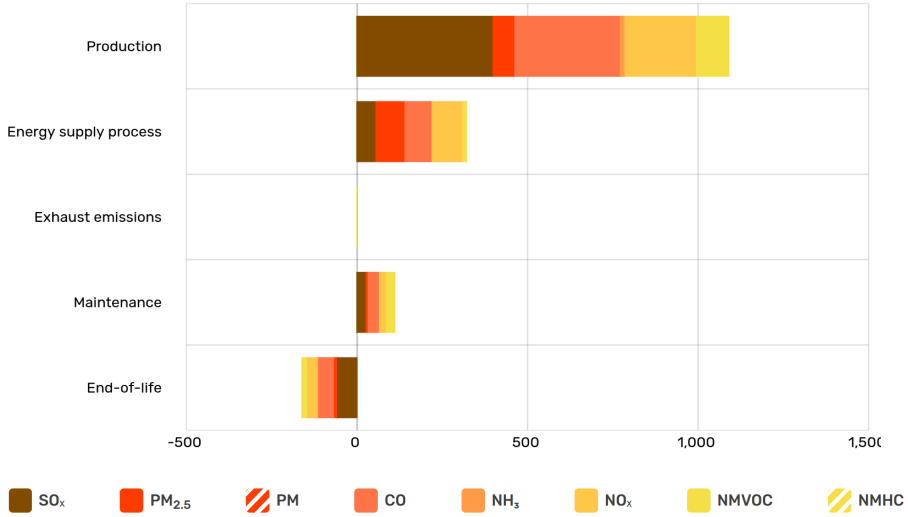
Life Cycle Assessment (LCA) investigates the environmental impact of a car over its entire lifetime, 'from cradle to grave'. In this section, pollutants are estimated in the various stages of a vehicle's life other than use. The chart also displays the measured emissions related to usage, which are taken as an average from the tests and are scored separately in the 'Exhaust emissions' part above. The end-of-life approach uses results in negative values because the benefit of materials recovery and recycling exceeds the effort of obtaining and processing virgin raw materials.

MARGINAL

4.9 /10

Pollutants

Most of the vehicle exhaust pollutant species are also emitted in others life cycle phases. These are health- and nature-damaging compounds, the amount of which should be reduced as well.



* Exhaust emissions are not contributing to the score in Additional Life Cycle Assessment information because they are scored in the Exhaust emissions section above

good | adequate | marginal | weak | poor | not applicable

Energy Efficiency

5.8 /10

Comments

It takes a lot of primary energy to produce a vehicle of this type which ultimately caps the score in the Energy Efficiency Index, but the score remains above average thanks to the strong powertrain efficiency. The vehicle will use below 20 kWh/100 km (incl. charging losses) in the warm test scenarios and surprises with only 24.4 kWh/100 km in the challenging Highway Test. It demands a lot of energy to quickly provide high thermal comfort at the Cold Winter Test, but once the cabin is heated, the energy consumption drops down significantly.

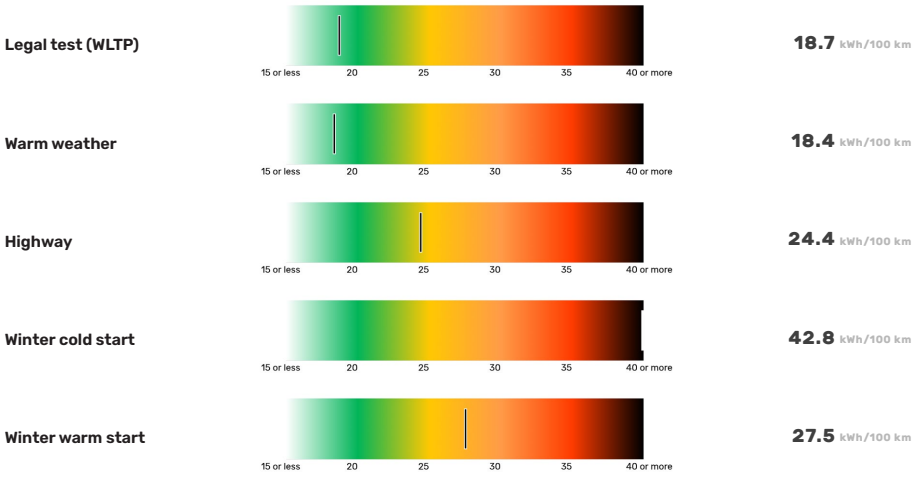
Energy demand

ADEQUATE **6.1**/10

Propulsion energy consumption in laboratory

ADEQUATE **8.7** /10

The vehicle's measured consumption figures are displayed in the bar chart. The colour scheme positions the values relative to low and high figures in a typical range. The ranges are different for combustion engine and pure electric vehicles.



good adequate marginal weak poor not applicable

Energy Efficiency

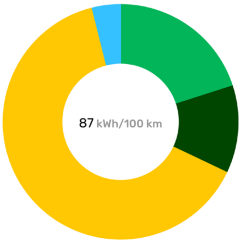
5.8 /10

Additional Life Cycle Assessment information

ADEQUATE 6.5/10

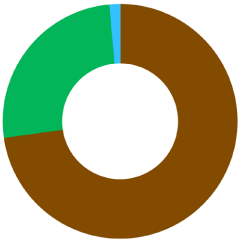
Life Cycle Assessment (LCA) investigates the environmental impact of a car over its entire lifetime 'from cradle to grave'. In this section, the total vehicle life cycle primary energy demand is displayed. The scoring does not consider the direct propulsion energy use, because it is scored separately in the 'Propulsion energy consumption in laboratory'.

Total LCA energy consumption



- Production & recycling 20.0%
- Battery production 12.0%
- Fuel/Energy supply 64.0%
- Maintenance 3.9%

Energy source share in total LCA consumption



- Fossil 72.8%
- Renewable 25.8%
- Other 1.4%

Direct propulsion energy share is not shown, it is included in 'Fuel/energy supply'

Rolling resistance

Rated here is the vehicle's resistance to movement at low speeds. Different factors have an impact on it, but the most significant one is mass.

POOR 0.0/10

good adequate marginal weak poor not applicable

Greenhouse Gases

7.6 /10

Comments

With no direct greenhouse gas emissions, the climate impact of the EQE is linked to the processes of production, maintenance and end-of-life treatment, as well as to the supply of the average European electricity mix. The car is produced in Europe and this boosts the results in this part of the assessment. The total life cycle greenhouse gas emissions are calculated to 156 g CO_2-eq./km, which results in a high score of 7.6.

Exhaust GHG emissions

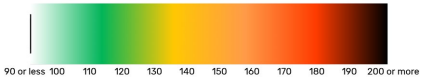
Combustion of conventional fuels releases greenhouse gases at the vehicle's tailpipe. The most significant of these gases are the emissions of CO_2. Green NCAP's assessment considers methane (CH_4) and laughing gas (N_2O) as well. Together, these are counted with their global warming potential to a sum known as CO_2 equivalent.

GOOD

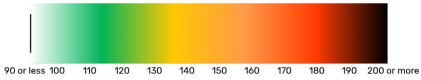
10.0 /10

In laboratory

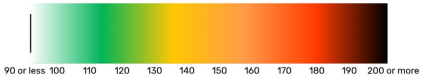
Green NCAP performs a wide range of tests on cars in the laboratory. This is the best way to ensure controlled conditions and guarantee that all cars are tested in the same way, making their results comparable. Read more



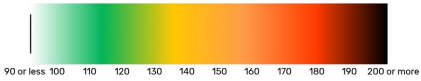
Legal test (WLTP) **0.0** g CO_2-eq./km



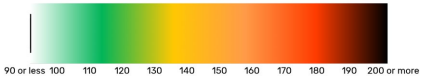
Warm weather **0.0** g CO_2-eq./km



Highway **0.0** g CO_2-eq./km



Winter cold start **0.0** g CO_2-eq./km



Winter warm start **0.0** g CO_2-eq./km

good adequate marginal weak poor not applicable

Greenhouse Gases

7.6 /10

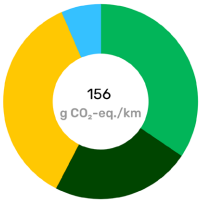
Additional Life Cycle Assessment information

Life Cycle Assessment (LCA) investigates the environmental impact of a car over its entire lifetime, 'from cradle to grave'. In this section, the total vehicle life cycle greenhouse gas emissions are displayed.

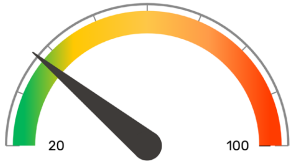
MARGINAL

3.4 /10

Total LCA GHG emissions



- Production & recycling 34.5%
- Battery production 23.1%
- Tailpipe emissions * 0.0%
- Fuel/Energy supply 35.9%
- Maintenance 6.5%



tonnes CO_2-equivalent/vehicle

Vehicle Life Cycle average emissions **37** (+/-)
(best **34** | worst **47**)

* The scoring does not consider the direct exhaust GHG emissions at the tailpipe, because they are scored separately in 'Exhaust GHG emissions' above.

good | adequate | marginal | weak | poor | not applicable

Driving Experience

Consumption & Range

ADEQUATE

Cold Winter Performance

GOOD

Charging Capability

ADEQUATE

Green NCAP Comment

- Although the EQE's powertrain is efficient, the absolute amount of energy needed to operate the large vehicle is greater than for most other EVs on the market. The estimated real-world consumption values mostly fall in the 'poor' assessment range. The highway consumption in warm weather is seen as 'adequate'. Thanks to the big battery, the estimated real-world driving ranges are found in the range "good" for warm weather trips and "adequate" for cold winter drives.
- Due to the high heating energy demand, drivers can significantly increase the driving range in cold winter days if possibile to preheat the vehicle prior to a trip start, while it is still plugged in. The EQE's cabin heating comfort is exceptional even in very cold conditions, as is the cabin's thermal insulation.
- The home AC charging performance is good and the car offers 22 kW charging as standard. The fast DC charging behaviour is found to be adequate. The EQE does not provide any kind of bi-directional charging functionalities.

Consumption & Range

ADEQUATE

Estimated actual consumption

POOR

What consumption can be expected in real world conditions?

In-laboratory measured consumption values are only partially representative of real-world use. Green NCAP's estimates aim at providing more realistic figures, which are based on measured results, modified by correction factors.

Conditions	Urban	Rural	Highway	Mixed	
Warm weather	21.5	21.4	22.3	21.7	kWh/100 km
Cold Winter	48.2	34.1	34.4	38.9	kWh/100 km

Driving range

GOOD

What driving range can be expected in real world conditions?

Of special importance to consumers is the real-world driving range of electric vehicles. Green NCAP estimates this based on measured data, modified by correction factors.

Conditions	Urban	Rural	Highway	Mixed	
Warm weather	505	507	486	499	km
Cold Winter	225	318	315	278	km

Accuracy of display

GOOD

Is the consumption figure on the display correct?

good adequate poor not applicable

Cold Winter Performance

GOOD

Driving range benefit of pre-warming

GOOD

How much further can you drive in winter, if the car is pre-warmed?

A cold vehicle has increased energy consumption at the start of its trip, mostly due to the cabin heating demand. Pre-warming the car while it is plugged, when possible, can significantly benefit its driving range in cold weather conditions. Green NCAP's winter tests are performed at -7°C.

Type	Driving Range Benefit	Result
Urban trip	+198 km	●
Mixed trip	+140 km	●

Cabin heating

GOOD

Does the vehicle get warm quickly in winter?

This indicates the time needed to reach 16°C in seconds at different positions in the cabin.

	Front	Rear
Head area	248 s ●	356 s ●
Footwell	160 s ●	

The rear footwell reached 16 C in 199 (left) and 173 (right) seconds.

● good ● adequate ● poor ● not applicable

Cold Winter Performance

GOOD

Additional heating functions

What functions can be used to improve heating comfort?

Unlike a combustion car, which usually uses the engine's waste heat to provide warmth to the cabin, in electric vehicles, the energy needed comes from the battery. Therefore, there is a trade-off between thermal comfort and energy consumption. Some additional heating functions can deliver good thermal comfort performance at lower energy use compared to heating up the entire cabin. If they can be scheduled or remotely activated before a trip, while the vehicle is still plugged, both comfort and driving range can be notably improved.

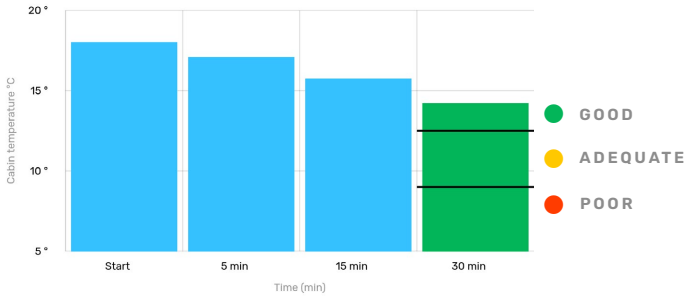
	Y/N	Fitment
Heat pump	✓	Standard
Seating heating front	✓	Standard
Seating heating rear	✓	Optional
Steering wheel heating	✓	Standard for the tested version
Sheduled pre-heating of seats	✓	Standard
Scheduled steering wheel pre-heating	✓	Standard for the tested version
Scheduled cabin air pre-heating	✓	Standard
Smart cabin heating management	✗	

Cabin thermal insulation

GOOD

How well does the cabin maintain its temperature?

Assessed here is the average cabin temperature drop after 30 minutes, starting from 18°C when the outside temperature is -7°C and the vehicle is inactive.



good adequate poor not applicable

Charging Capabilities

ADEQUATE

Battery pre-conditioning

Does the vehicle have the ability to optimize the battery temperature for fast charging?

Fast charging is quicker when the battery temperature is in a certain range, and many vehicles possess the function to actively prepare for a coming fast charging event. Most use the charger destination in the navigational system to control the process, and some would offer a manual activation function.

	Manual	Automatic
Battery pre-conditioning	✗	✓

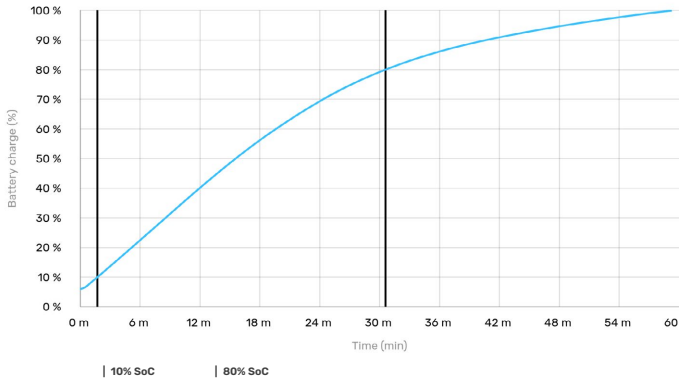
Fast charging

ADEQUATE

Green NCAP's fast charging test verifies the vehicle's ability to recharge fast, which is crucial at long trips or tight schedules. Although constantly improving, not all vehicles offer the same capabilities.

Charging time[1]

How quickly can the battery charge?



[1] Fast charging data provided by ADAC.

good | adequate | poor | not applicable

Charging Capabilities

ADEQUATE

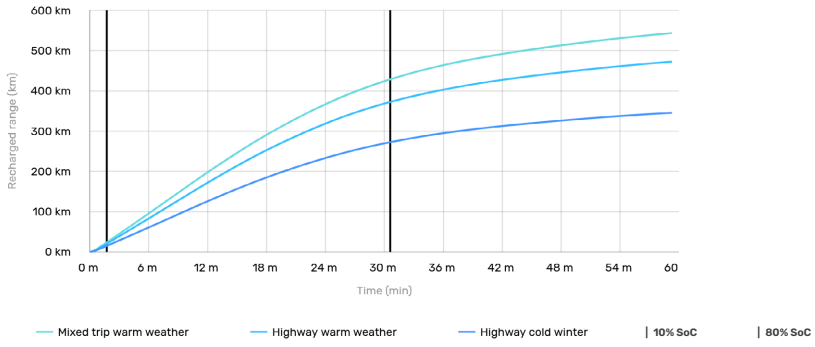
Fast charging

ADEQUATE

Green NCAP's fast charging test verifies the vehicle's ability to recharge fast, which is crucial at long trips or tight schedules. Although constantly improving, not all vehicles offer the same capabilities.

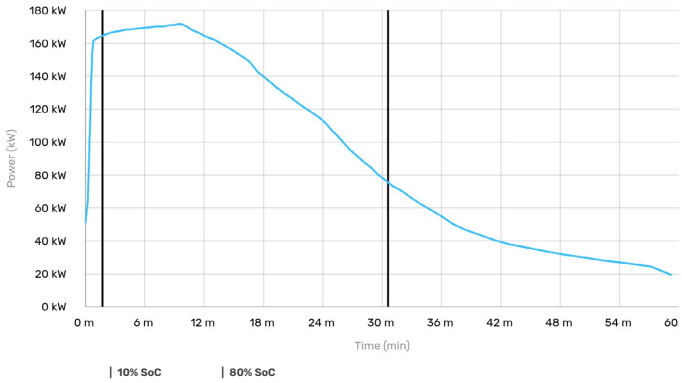
Recharged range gain per charging time[1]

How long do you need to fast charge to drive a certain distance?



Charging power[1]

How quickly does energy flow into the battery, depending on its charge level?



[1] Fast charging data provided by ADAC.

good | adequate | poor | not applicable

Charging Capabilities

ADEQUATE

Home charging efficiency

GOOD

Is charging at home efficiently utilizing the energy withdrawn from the grid?

The assessed efficiency value is the grid-to-battery-output efficiency, which describes what share of the energy taken from the electricity grid is available for the vehicle to use for propulsion and other auxiliary functions. The value encompasses not only the charger efficiency but considers several other losses as well.

Home charging efficiency	**90** %	
Maximum home charging power	**22.0** kW	Standard

Bidirectional charging

POOR

How capable is the vehicle of supplying energy from its battery to other devices or systems?

Bi-directional charging is available in some vehicles and is gaining increasing popularity. It comes with different power and functionality levels. However, battery usage for purposes additional to regular vehicle driving and charging might be disadvantageous for its durability and manufacturers might introduce limitations to protect it.

Power output

Not available

Compatibility

Vehicle-to-Load (V2L)
The inlet or the interior socket can provide AC power through an electrical domestic socket.

Vehicle-to-Household (V2H)
The vehicle can provide power to a household through a charger.

Vehicle-to-Grid (V2G)
The vehicle can return power to the grid.

Grid integration

Basic
No integration (just a socket for a stand-alone load). No scheduling option. Very basic visualisation.

Limited
Energy management system through the vehicle app (timers availability and power monitoring). Dedicated interface in the car, with mobile app monitoring.

Advanced
Advanced settings available such as tariff and consumption control, linked to distributor energy prices. Advanced real time energy flow visualization. AI powered suggestions for optimal usage.

good adequate poor not applicable

Specifications

Vehicle class
Executive Car

System power/torque
215 kW/565 Nm

Engine size
n.a.

Declared consumption
18.7 kWh/100 km

Declared driving range
Overall 602 km
City 672 km

Declared CO_2
n.a.

Declared battery capacity
Usable (net) 96.0 kWh
Installed (gross) 101.0 kWh

Mass
2,483 kg

Heating concept
Waste heat & PTC heater & heat pump

Tyres
255/45R19

Emissions class
AX

Tested car
W1KEG2BBXSF05xxxx

Publication date
09 2025