

Kia EV4

81.4 KWH EARTH ELECTRIC FWD AUTOMATIC



Sustainability Rating

2026



90%



**Clean
Air**

8.8 /10



**Energy
Efficiency**

8.9 /10



**Greenhouse
Gases**

9.5 /10

Driving Experience



**Consumption
& Range**

GOOD



**Cold Winter
Performance**

ADEQUATE



**Charging
Capability**

ADEQUATE

Our verdict

The KIA EV4 scores well in the sustainability assessment. The powertrain is efficient and this manages to compensate for the higher environmental burden of the relatively large 81.4 kWh battery. The life-cycle calculations also benefit from vehicle production in Europe where the energy mix is clean compared to some other world regions.

- › Scores poorly for tyre abrasion due to high vehicle mass and aggressive pedal tuning, but brake abrasion is minimised through extensive regenerative braking. Keeps production- and electricity-related emissions low.
- › Delivers low electricity consumption across all tests thanks to an efficient powertrain and heating system. Achieves an impressive 13.9 kWh/100 km in the summer on-road test.
- › Achieves an excellent GHG score through efficient operation, European production, and a relatively clean electricity mix. Limits lifecycle emissions to ca. 119 g CO₂-eq./km.

Disclaimer

Think before you print



Clean Air

8.8 /10

Comments

The score for tyre abrasion is relatively low due to the higher vehicle mass and the aggressive accelerator pedal response, which could lead to higher tyre slip in everyday use. On the positive side, thanks to a very high share of electric braking, the use of friction braking is kept to a minimum and the brake abrasion result is very good. Production- and electricity supply-related emissions score a high 7.5/10.

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

GOOD ● 10.0 /10

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](#)

	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

GOOD ● 10.0 /10

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

	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



8.8 /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.

ADEQUATE 

6.3 /10

Tyre wear

MARGINAL 

2.4 /6

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](#)

	Result	Score
Influence of mass		1.4 /3
Wheel alignment		1.0 /1
Accelerator response		0.0 /2

Brake wear

ADEQUATE 

5.2 /6

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](#)

	Result	Score
Brake dust mitigation		0.0 /4
Brake dust containment		0.0 /6
Recuperative braking - warm test		5.2 /6



Additional Life Cycle Assessment information

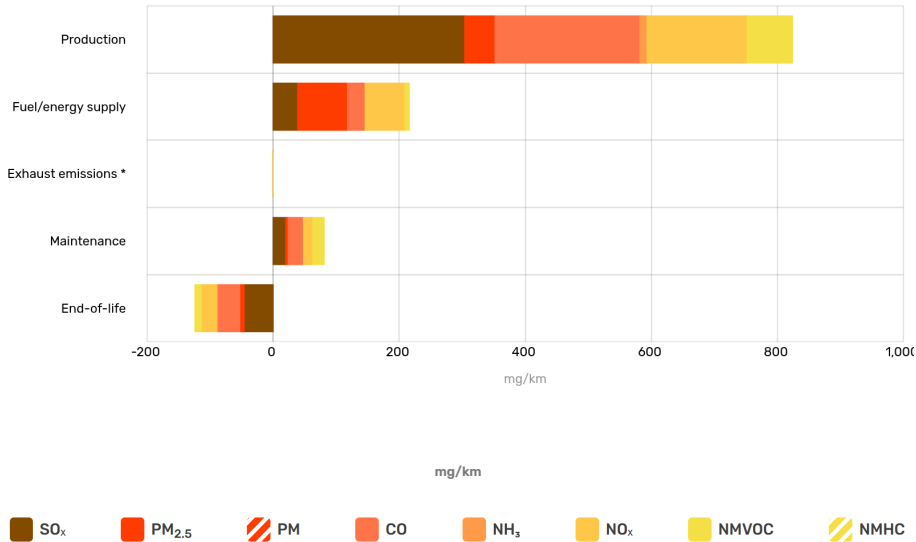
Life Cycle Assessment (LCA) investigates the environmental impact of a car over its entire lifetime, 'from cradle to grave'. In this section, pollutants are estimated in the various stages of a vehicle's life other than use. The chart also displays the measured emissions related to usage, which are taken 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.

ADEQUATE ●

7.5 /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

Energy Efficiency

8.9 /10

Comments

The KIA EV4 is equipped with a low-consumption powertrain and an obviously efficient heating system, which features an optional heat pump. The car’s consumption figures remain low even in the challenging highway cycle and in the -7°C cold weather sequence. The on-road drive was performed in hot and dry summer weather and the recorded electricity demand was impressively thrifty 13.9 kWh/100 km.

Energy demand

ADEQUATE

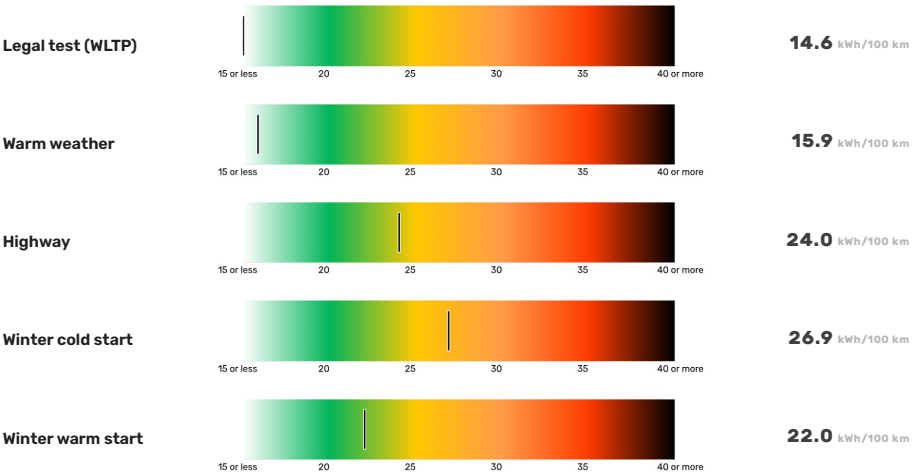
9.0 /10

Propulsion energy consumption in laboratory

GOOD

9.9 /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

8.9 /10

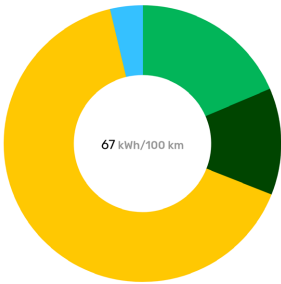
Additional Life Cycle Assessment information

ADEQUATE 

8.9 /10

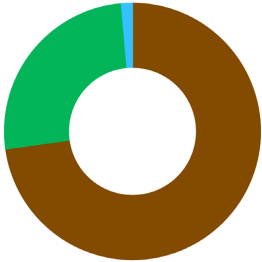
Life Cycle Assessment (LCA) investigates the environmental impact of a car over its entire lifetime 'from cradle to grave'. In this section, the total vehicle life cycle primary energy demand is displayed. The scoring does not consider the direct propulsion energy use, because it is scored separately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

Total LCA energy consumption



-  Production & recycling 18.6%
-  Battery production 12.5%
-  Fuel/energy supply * 65.2%
-  Maintenance 3.7%

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.

ADEQUATE 

7.3 /10



-  good
-  adequate
-  marginal
-  weak
-  poor
-  not applicable

Greenhouse Gases

9.5 /10

Comments

Greenhouse gases is the car’s strongest of the three assessment categories. It collected 9.5/10 points, demonstrating very low lifecycle impact on the climate, thanks to adequate sizing, production in Europe, with its relatively green average electricity mix. The total number is calculated to 118.9 g CO₂-eq./km, which is just above Green NCAP’s lower threshold, meaning the car loses very few points for this part of the assessment

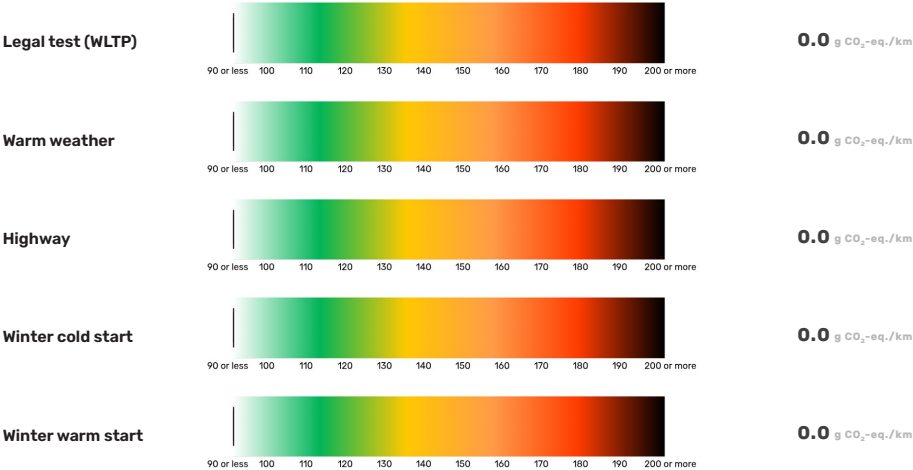
Exhaust GHG emissions

Combustion of conventional fuels releases greenhouse gases at the vehicle’s tailpipe. The most significant of these gases are the emissions of CO₂. Green NCAP’s assessment considers methane (CH₄) and laughing gas (N₂O) as well. Together, these are counted with their global warming potential to a sum known as CO₂ 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](#)



good adequate marginal weak poor not applicable

 Greenhouse Gases

9.5 /10

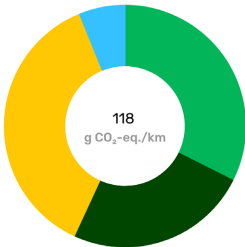
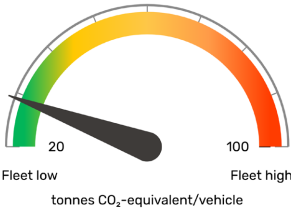
Additional Life Cycle Assessment information

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.

ADEQUATE 

6.2 /10

Total LCA GHG emissions



Vehicle Life Cycle average emissions **29** (+/-)
(best **25** | worst **32**)

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





Driving Experience



Consumption & Range

● GOOD



Cold Winter Performance

● ADEQUATE



Charging Capability

● ADEQUATE

Green NCAP Comment

The KIA EV4 electric's Driving Experience ranges from adequate to good.

- › The car shows good and adequate estimated real-world consumption values in different tests. With the relative large battery, the estimated driving ranges are all rated as good. Drivers can trust the consumption figures shown on the display but need to remember that, as with every other electric vehicle, the displayed figures do not reflect the energy amount charged from the grid, but only the energy the vehicle uses from its battery. The amount needed to charge it is naturally higher.
- › The heating performance of the car in -7°C cold start conditions did not impress, as shorter heat-up times were expected for an EV. However, the rear footwell reached the target temperature relatively quickly, increasing comfort to the rear seat passengers. The EV4's driving range can benefit well from preconditioning the car prior to a cold weather trip, while it is still plugged in. This way, an additional 135 km of range can be gained in urban trips. For a mixed trip, the figure is 76 km. The cabin thermal insulation is good, meaning that once heated up, the car retains the warmth well inside the cabin.
- › The standard home AC charging receives an 'adequate' rating just below the border to 'good' and the fast DC charging performance is adequate. The vehicle impresses with its capability of bidirectional charging. It can deliver up to 3.6 kW to a connected external consumer through its plug-in vehicle-to-load mode and is prepared for vehicle-to-grid operation.



Consumption & Range

GOOD

Estimated actual consumption

GOOD

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	15.3 	16.9 	19.5 	17.0 	kWh/100 km
Cold Winter	25.3 	21.7 	26.0 	24.5 	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	608	549	476	548	km
Cold Winter	367	427	357	380	km

Accuracy of display

GOOD

Is the consumption figure on the display correct?



good adequate poor not applicable



Cold Winter Performance

ADEQUATE ●

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	+135 km	●
Mixed trip	+76 km	●

Cabin heating

POOR ●

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 after the cold vehicle has been started at -7°C ambient temperature.

	Front	Rear
Head area	506 ●	780 ●
Footwell	918 ●	

The rear footwell area left reached the temperature in 365 seconds and in the right in 301 seconds.





Cold Winter Performance

ADEQUATE ●

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.

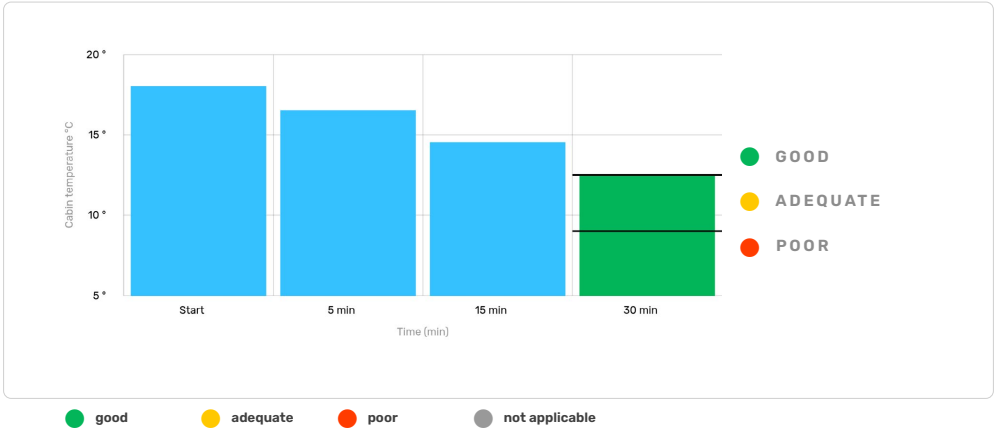
	Y/N	Fitment
Heat pump	✓	Optional for the tested version
Seating heating front	✓	Standard for the tested version
Seating heating rear	✗	Optional
Steering wheel heating	✓	Standard for the tested version
Sheduled pre-heating of seats	✗	Optional
Scheduled steering wheel pre-heating	✗	Optional
Scheduled cabin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





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	✓	✓

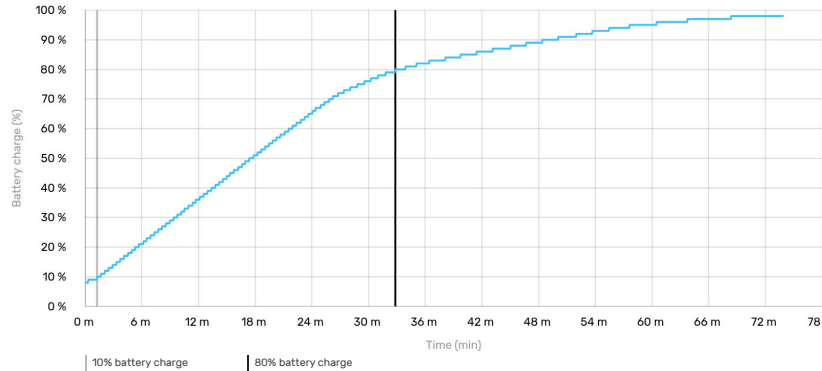
Fast charging

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

How quickly can the battery charge?





Charging Capabilities

ADEQUATE ●

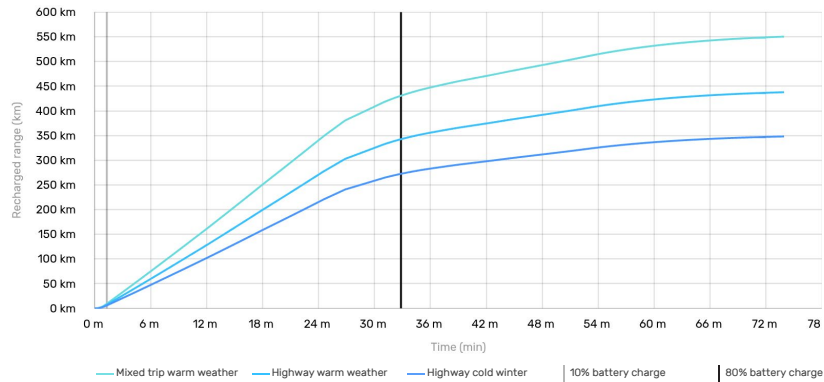
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ADEQUATE ●

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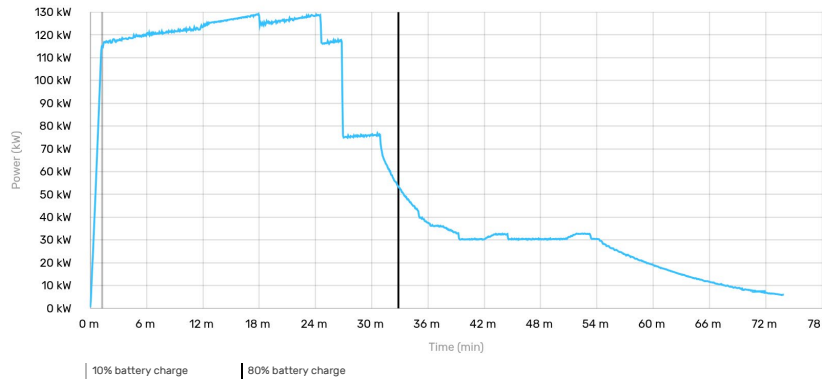
Recharged range gain per charging time

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



Charging power

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





Charging Capabilities

ADEQUATE ●

Home charging efficiency

ADEQUATE ●

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	89% ●
Maximum home charging power	11.0 kW

Bidirectional charging

ADEQUATE ●

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 3.6 kW Fitment: Optional		
Compatibility		
<div>✓</div> Vehicle-to-Load (V2L) The inlet or the interior socket can provide AC power through an electrical domestic socket.	<div>✓</div> Vehicle-to-Household (V2H) The vehicle can provide power to a household through a charger.	<div>✓</div> Vehicle-to-Grid (V2G) The vehicle can return power to the grid.
Fitment: Optional		
Grid integration		
<div>✓</div> Basic No integration (just a socket for a stand-alone load). No scheduling option. Very basic visualisation.	<div>✓</div> Limited Energy management system through the vehicle app (timers availability and power monitoring). Dedicated interface in the car, with mobile app monitoring.	<div>✗</div> 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.



Specifications

Vehicle class
Small Family Car

System power/torque
150 kW/283 Nm

Engine size
n.a.

Declared consumption
14.6 kWh/100 km

Declared driving range
Overall 625 km
City 799 km

Declared CO₂
n.a.

Declared battery capacity
Usable (net) 81.4 kWh
Installed (gross) n.a.

Mass
1,853 kg

Heating concept
PTC heater & heat pump

Tyres
215/60 R17

Emissions class
AX

Tested car
U5YD35130TL00xxxx

Publication date
09 2026

Also covered by this rating

Variants Names may vary by country

Kia EV4
81.4 kWh Air electric FWD automatic



