

# **EV FACT SHEET**

Kia e-Niro

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Image: Kia

## **INTRODUCTION**

Kia is Korea's second largest vehicle manufacturer (second only to Kia's parent company – Hyundai). It should therefore come as no surprise then that the Kia e-Niro shares the same battery and motor as the Hyundai Kona electric.

Compared to the equivalent Kona electric, the e-Niro had a bigger boot capacity, quicker 0 – 100 time, quieter ride and much the same WLTP driving range. On the other hand, the e-Niro is almost 200mm longer and slightly heavier than its Hyundai sibling. If this vehicle segment and price is where you are looking: ultimately it comes to preference over small details to choose between the two.

The e-Niro first went on sale overseas in 2019, and, after several delays, finally arrived here in the first half of 2021. In the second half of 2022 a totally revised version arrived with a different interior, larger dimensions and restyled interior. It was also renamed as the Niro EV.

A separate Fact Sheet found in the New Passenger cars page covers this later version.

#### **DRIVING RANGE**

Australian test standards are currently in a state of flux, with the Green Vehicle Guide<sup>1</sup> showing some vehicle driving ranges using either the old (and highly over optimistic) European NEDC test cycle figure or the newer European WLTP test cycle figure. Worse still, for recent additions to the Australian market the GVG often gives no data is given at all! Around town, the WLTP figure is the best guide to range or, if doing outer suburban to regional driving – use the US EPA figure.

## **DRIVING RANGE (continued)**

National testing system range estimates					
NEDC (Aust)	WLTP (Euro)	US EPA			
Not yet rated	455km	382km			

Table 1: Driving range estimates for the Kia e-Niro

Using the US EPA range — a typical e-Niro return range within Victoria for is shown on the map below. Top-up charging for this trip would be recommended. Options include a 1hr top-up AC charge over lunch in Shepparton using a 7kW AC charger, a 10 — 15 minute DC fast charge at one of the new Shepparton DC chargers, or on the return trip at the DC chargers at either Avenel or Euroa. (Both of the latter requiring a slight detour via the Hume Freeway).



Image: Google maps

## **CHARGING SPEEDS/REQUIREMENTS**

#### **Charging port**

The e-Niro is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers<sup>2</sup> as well as via CCS2 DC fast-chargers.





CCS2 charging plug and socket

## Notes:

- https://www.greenvehicleguide.gov.au
- The e-Niro can be charged at any AC EVSE, however an adaptor will be needed to use the (few) remaining older EVSEs fitted with Type 1 (J1772) plugs.

## **CHARGING SPEEDS/REQUIREMENTS (CONTINUED)**

#### AC charging:

Although fitted with the 3 phase type 2 AC socket as part of the CCS2 system, the e-Niro electric charges using single phase AC only at a maximum of 7.2kW (32A).

Charging speeds and times vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) it is connected to and the chosen battery size. Charging times for the e-Niro are shown in table 2 below.

EVSE type:						
10 A socket	16 A	32 A	16 A	DC Fast	DC Fast	
	1 phase	1 phase	3 phase	charge	charge	
	(3.6 kW)	(7.2 kW)	(11 kW)	(50kW)	(100kW)	
28h	19h	9h 35m	19h	75m	54m	
				(to 80%)	(to 80%)	

Table 2: Charging times for the Kia e-Niro

## DC fast charging:

The e-Niro uses the CCS2 DC fast-charge connector and can charge at up to 77kW.

This connector is fast becoming the majority DC fastcharge connector type in both Australia and overseas.

#### **HOME CHARGING CONSIDERATIONS**

## General

To get the shortest home charging time for an e-Niro, a 7.2kW three phase AC EVSE would be needed.

However, depending on your existing power supply and/or charging needs, a lower rated EVSE may only be practicable, or needed. (See notes below). Lower capacity EVSEs will increase charging times, as shown in table 1 above.

The e-Niro also comes with a Mode 2 portable EVSE for plugging into a 10A power point. Charging with this EVSE will take around 28hrs to do a 0-100% charge.

## Important notes for any home EVSE installation:

- 1. High charging rates are generally not needed for overnight charging.
- Homes do not normally have three phase AC connected;
- Switchboard and/or electrical supply upgrades may be needed if your home is more than 20 years old. (For more information on this item - read articles in:
  - (a) Renew magazine edition 143. (EVSE wiring)
  - (b) Renew magazine edition 156. (EVSE buyer's guide)

#### **SPECIFICATIONS**

### Boot volumes in litres (1 litre = $10 \times 10 \times 10 \text{ cm}$ )

Seats up: 451 LSeats down: 1405 L

#### **Dimensions:**

Overall length: 4375 mm

• Overall width:

o 1805 mm (mirrors in)

Not specified (mirrors out)

Overall height: 1570 mm

#### **Battery:**

• 64 kWh (useable)

# **Energy consumption: (WLTP)**

• 159 Wh/km

#### Kerb weight:

• 1812 kg

# **Drive configuration:**

• Front wheel drive

#### Maximum power:

• 150kW

#### 0-100 km/h time:

• 6.9 sec

## **IMPORTANT NOTE:**

Always check all specifications with the manufacturer prior to any purchase. No responsibility accepted by AEVA or Bryce Gaton for errors factual or due to reproduction in this Fact Sheet. Whilst all efforts are made to ensure the accuracy of the material in this Fact Sheet, manufacturers regularly make changes (often unannounced) to their model ranges and specifications.

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<sup>\*</sup> Note: to 80% charge