



# EV FACT SHEET

## Kia Niro EV

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2022 update model shown. 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 Niro electric shares the same battery and motor as the Hyundai Kona electric – albeit with a slightly larger and heavier body than the Kona EV.

The Niro electric first went on sale overseas in 2019, and, after several delays, finally arrived here in the first half of 2021 – with a significant update of the model being made in the second half of 2022. This update includes an increase in AC charging to 11kW max, different (and slightly larger) body styling and a new interior layout.

### 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.

| National testing system range estimates |             |        |
|---|-------------|--------|
| NEDC (Aust)                             | WLTP (Euro) | US EPA |
| Not yet rated                           | 460km       | 405km  |

Table 1: Driving range estimates for the Kia Niro electric

### DRIVING RANGE (continued)

Using the US EPA range – a typical Niro electric return range should enable a day-trip from the Melbourne GPO to Shepparton and back, provided the heater or air conditioner are not heavily used. (As shown on the map below). Top-up charging options include a 1hr top-up AC charge over lunch in Shepparton using an 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). For further charging options and locations, visit:

<https://www.plugshare.com/>

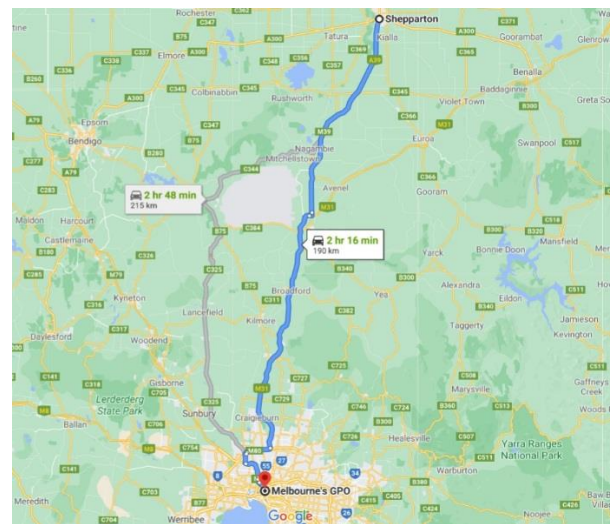


Image: Google maps

### CHARGING SPEEDS/REQUIREMENTS

#### Charging port

The Niro electric 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 Niro electric 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:

Like almost all new EVs sold in Australia, the Niro EV is fitted with a type 2 AC socket as part of the CCS2 AC/DC charge plug system. **Note:** The original model Niro EV charged at a maximum of up to 7.4 kW single phase.

### Charging rates (2022 update Niro EV):

**Single phase:** maximum of 7.4kW (32A)

**Three phase:** 11kW (16A per phase)

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 Niro electric are shown in table 2 below.

| AC: 0 – 100% time        |  |                                   |  | DC: 0 – 80% time            |                              |
|--------------------------|--|-----------------------------------|--|-----------------------------|------------------------------|
| 10 A<br>(power<br>point) | 15 A<br>1 phase<br>(Caravan<br>outlet) | 32 A<br>(1 phase<br>Home<br>EVSE) | 16 or 32 A<br>(3 phase<br>public AC<br>EVSE) | DC Fast<br>charge<br>(50kW) | DC Fast<br>charge<br>(350kW) |
| 30h                      | 19h                                    | 10h                               | 7h   | 75m                         | 50m                          |

Table 2: Charging times for the Kia Niro electric (2022 update)

### DC fast charging:

The Niro EV uses the CCS2 DC fast-charge connector and can charge at up to 85kW. (Previous model: 77kW) This connector is fast becoming the majority DC fast-charge connector type in both Australia and overseas.

## HOME CHARGING CONSIDERATIONS

### General

To get the shortest home charging time for a Kia Niro EV, an 11kW 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 Niro EV also comes with a Mode 2 portable EVSE for plugging into a 10A power point. Charging a Niro EV with this EVSE will take around 30 hrs for a 0 – 100% charge.

### Important notes for any EVSE installation:

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

## SPECIFICATIONS

### Boot volumes in litres (1 litre = 10 x 10 x 10 cm)

- Seats up: 475 L
- Seats down: 1392 L

### Dimensions:

- Overall length: 4420 mm
- Overall width:
  - 1825 mm (mirrors in)
  - Not available (mirrors out)
- Overall height: 1570 mm

### Battery:

- 64.98 kWh (useable)

### Charging:

- 1 phase AC: 7.4kW max.
- 3 phase AC: 11kW max.
- DC: 85kW max.

### Charge port location:

- Front, left of centre.

### Energy consumption: (WLTP)

- 162 Wh/km

### Kerb weight:

- 1727 kg

### Drive configuration:

- Front wheel drive

### Towing:

- 750 kg braked/300 kg unbraked.

### Performance:

- Maximum power: 150 kW
- Maximum torque: 255 Nm
- 0 – 100km/hr: 7.8 sec

## IMPORTANT NOTES:

**Always check the specifications with the manufacturer prior to any purchase. No responsibility accepted by AEVA or Bryce Gatton 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. This Fact Sheet is prepared by EV Choice and provided free to AEVA for non-commercial use.**