

EV FACT SHEET

Toyota bZ4X

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Toyota bZ4X Image: Toyota Australia

INTRODUCTION

The Toyota bZ4X is the very first all-electric car to be built by Toyota. Based on their new electric-only e-TNGA platform, it fits into the upper end of the Australian VFACTS 'medium SUV' category.

The bZ4X first became available in Japan, Europe and the USA from around mid-2022. Its path to Australia however has been slow and, like many promised EV launches, much delayed with sales here only commencing in March 2024.

The bZ4X is currently offered in two versions: front-wheel drive (FWD) and a slightly higher ground clearance allwheel drive (AWD). It is also the first Toyota to Australia to display their new 'hammerhead' frontal design theme, where the bonnet surface continues to the nose and extends to each corner.

DRIVING RANGE

Currently, the official Australian ADR 81/02 test cycle is based on the outdated (and highly over-optimistic) European NEDC test cycle. However few manufacturers now give this figure for their new releases. Instead they generally quote the more achievable ranges found using the newer European WLTP test cycle.

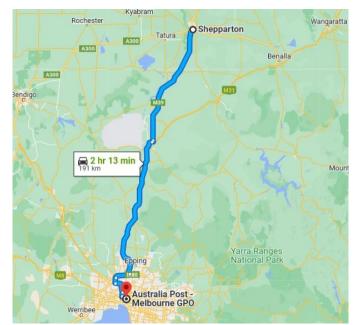
Therefore, to avoid disappointment always check which test cycle has been used when assessing an EV for your needs. As a rough guide, NEDC is generally 30% too high, WLTP a good estimate if doing mostly urban and outer suburban driving and US EPA the better guide if doing mostly outer suburban to regional driving.

National testing system range estimates:						
Version	NEDC (Aust)	WLTP (Euro)	US EPA			
FWD	535 km	436 km	389 km			
AWD	485 km	411 km	357 km			

 Table 1: Driving range estimates for the Toyota bZ4X.

DRIVING RANGE (continued)

Using the US EPA rating, a FWD Toyota bZ4X would, at its limit, make a round-trip from the Melbourne CBD to Shepparton – provided the heating or air conditioning were not heavily used. For this sort of trip, a short DC topup at one of the increasing number of DC charger sites either in Shepparton itself, or at one of the multiple new DC charger sites on the major routes would be recommended. (These include Ngambie, Euroa, Avernel, Seymor, etc). For further charging options and availability, see: https://www.plugshare.com/).



Example Toyota bZ4X return trip range. Image: Google maps

CHARGING SPEEDS/REQUIREMENTS

Charging port

The bZ4X is fitted with a CCS2 socket allowing it to charge via Type 2 AC chargers¹ as well as CCS2 DC fast-chargers.



CCS2 charging plug and socket

Notes:

 The Toyota bZ4X 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 all new EVs sold in Australia, the Toyota bZ4X is fitted with a type 2 AC charging socket.

Charging rates:

Single phase: maximum of 7 kW (32A) Three phase: maximum of 11 kW (16A, per phase)

Charging speeds vary on the capacity of the EVSE (Electric Vehicle Supply Equipment) the car is connected to. Approximate AC charging times for the bZ4X are shown in table 2.

	DC: 0 – 80% time				
10 A (power point)	15 A 1 phase (Caravan outlet)	32 A 1 ph. (Home EVSE)	16 or 32 A (3 phase public AC EVSE)	DC Fast charge (50kW)	DC Fast charge (150kW+)
30h	20h	10h 45m	7h 40m	68m	34m

Table 2: Approx. charging times for the Toyota bZ4X

DC fast charging

The Toyota bZ4X uses the CCS2 DC fast-charge connector and can charge at up to 150 kW DC.

V2X capability:

The Toyota bZ4X currently does not include any V2X capability.

V2X is the generic term covering the options of getting 230V AC power from the battery and supplying it as:

- V2L: vehicle to load (230V power available from outlet in car)
- V2H: vehicle to home (supply home via special connection)
- V2G: vehicle to grid (supply home or grid via spec. connection)

HOME CHARGING CONSIDERATIONS

General

To get the shortest home charging time for the bZ4X E-Tech, a three phase, 11 kW three phase AC charger would be needed.

However, depending on your existing power supply and/or charging needs, it may only be practicable to fit a lower rated EVSE. (See notes below). Lower capacity EVSEs will increase charging times, as shown in table 2.

Important notes for any home EVSE installation:

- 1. High charging rates are generally not needed for overnight charging.
- 2. 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 – see information pages at <u>EVchoice.com.au</u> or read articles in:
 - (a) Renew magazine edition 143. (EVSE wiring)
 - (b) Renew magazine edition 156. (EVSE buyer's guide)

SPECIFICATIONS

Seating: 5

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

- Seats up: 421 (FWD); 410 (AWD)
- Rear seats folded: Not specified
- Froot (front boot): NA

Dimensions:

- Overall length: 4,690 mm
- Overall height: 1,650 mm
- Ground clearance-FWD: 182 mm
- Ground clearance-AWD: 212 mm
- Overall width (edge of doors): 1,860 mm
- Overall width (edge of mirrors): 1,860 mm

Battery:

• 71.4 kWh (64 usable: TBC)

Energy consumption: (WLTP)

- FWD: 16 kWh/100 km
- AWD: 18 kWh/100 km

Kerb weight:

- 1,960 kg (FWD)
- 2,025 kg (AWD)

Charging:

- 1 phase AC: 7 kW maximum
- 3 phase AC: 11 kW maximum
- DC: 150 kW maximum

Charge port location:

• Left side front (in front of passenger door)

Drive configuration:

• Front-wheel drive or all-wheel drive

Towing:

• 750 kg unbraked/750 kg braked

Performance:

	Max. Power	0 to 100km/h
Variant:	(kW)	(Sec)
Front-wheel drive	150	7.5
All-wheel drive	160	6.9

IMPORTANT NOTES:

Always check for the latest vehicle specifications with the manufacturer prior to any purchase. No responsibility accepted by AEVA or Bryce Gaton (EV Choice) 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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