### **Vehicle Types**

Please note, all references are for illustration only.

Other vehicles may be available and prices/information are taken from internet research. There may be better deals available.

1. Electric Plug in vehicles (fully electric and plug in petrol hybrid).

These vehicles are purpose-built taxis and have CO2 emissions of less than 50g/km and can travel at least 112km (70 miles) without any emissions at all:

Dynamo Taxi



Image of Dynamo Taxi (dynamotaxi.com)

The Dynamo taxi is 100% electric and comes with a side wheelchair access <a href="https://www.dynamotaxi.com/why-dynamo/">https://www.dynamotaxi.com/why-dynamo/</a>. According to the website, the 'launch price' is £48k and a 'rapid charge' takes 40-60 minutes.

#### LEVC TX



Image of LEVC TX (levc.com)

The LEVC TX is powered by a lithium-ion battery and features a petrol range extender to maintain the battery charge state. The battery always powers the motor and drives the vehicle. The range-extender acts as a backup generator and is only used to trickle-charge the battery to maintain its current state of charge. <a href="https://www.levc.com/tx-electric-taxi/">https://www.levc.com/tx-electric-taxi/</a>

It can run in 3 different modes:

- 1) Pure EV mode disables the range extender, using only electric power. This consumes no petrol and produces no emissions a very effective option for inner-city driving. If the battery becomes depleted, an indicator advises the driver to select a different driving mode. This mode is only available when the battery has sufficient charge.
- 2) Smart mode is the default operating mode which operates TX in the most efficient way by depleting the battery as much as possible before engaging the range extender. In this mode the vehicle intuitively activities the range extender as the battery charge decreases, particularly if driving at higher speeds where pure-electric propulsion is less efficient.
- 3) Save mode in this mode the vehicle only uses the range extender so as to conserve the battery's charge at its current level. By using 'Save' mode, drivers with a commute to the city could reserve their battery energy for emission-free driving in the city.

There will still be some emission when using the range extender but if used properly the emissions from a TX should be much less than a normal petrol hybrid or a Euro 6 diesel taxi. It wouldn't be cost effective for a driver to use the save mode (range extender) for general driving around the city so hopefully that would be enough of a deterrent and ensure they were using it as intended (in pure EV or smart mode).

According to the website, a new LEVC TX costs around £56k or £754 per month for 84 months.

# Other 'plug in' vehicles

The following vehicles are also now available to order but they will require a conversion to be wheelchair accessible:

EV wheelchair taxi based on Nissan eNV-200 Combi (100% electric). <a href="https://www.brotherwood.com/wheelchair-accessible-vehicles/electric-wheelchair-accessible-vehicle-nissan-env-200/">https://www.brotherwood.com/wheelchair-accessible-vehicles/electric-wheelchair-accessible-vehicle-nissan-env-200/</a>



Image of Nissan eNV-200 Combi (nissan.co.uk)

According to the Nissan website, a new eNV-200 costs around £30k. A rapid charge is 40-60 minutes.

EV wheelchair taxi based on RENAULT KANGOO Z.E. (100% electric) <a href="https://tripodmobility.com/en/products/wav-wheelchair-accessible-vehicles/electric-wav/">https://tripodmobility.com/en/products/wav-wheelchair-accessible-vehicles/electric-wav/</a>

Plug in hybrid (PHEV) wheelchair accessible Ford Tourneo (plug in petrol hybrid) <a href="https://www.cabdirect.com/car/ford-tourneo-custom-hybrid/">https://www.cabdirect.com/car/ford-tourneo-custom-hybrid/</a>



Image of Tourneo Custom Hybrid (trustford.co.uk)

According to the Ford website, these vehicles new cost around £42k.

There are also a range of plug-in electric saloon vehicles which, under the recommended option, will be suitable as a private hire vehicle or a replacement for a hackney carriage (where the vehicle is already licensed as a saloon). An example would be a plug in Toyota Prius (below). There are some second hand versions of these vehicles available in the region of £25k or around £350 per month.



Image of a Toyta Prius (toyota.co.uk)

#### Hybrid vehicle – Euro 6 examples

A hybrid car is a vehicle that typically combines a conventional combustion engine (usually petrol-powered) with an electric motor. There are various versions, but typically the petrol engine will charge the electric battery to enable the vehicle to drive on electric at low speeds around town. The car reverts to the petrol engine when the vehicle has lost its charge or at higher speeds.

There are a number of vehicle manufacturers making hybrid vehicles of this type including Toyota (Prius/Corolla), Kia Niro and Hyundai Ioniq. A brand new Hyundai Ioniq is available from around £22k.



Image of Hyundai Ioniq (Cargurus.com)

However, as hybrid petrol vehicles have been on the market for some years, there are vehicles available which are three to four years old and as such have depreciated in value. It is possible to buy a vehicle of this nature for £15-£18k – perhaps around £300 a month on finance - but these vehicles would be subject to a 7 year age limit! There are hybrid petrol hybrid BMW's available and the Ford Tourneo Custom for large multi-people carriers for those that prefer such vehicles.

# <u>Euro 6 Petrol and Diesel – Wheelchair accessible vehicles (WAV)</u>

For drivers wanting to continue to run petrol or diesel vehicles, these would have to be Euro 6 and wheelchair accessible. They would also be subject to the 7 year age limit. New and nearly new wheelchair accessible vehicles are readily available from around £25k. Again research shows that there are vehicles 3-4 years old vehicles available for around £15k or less.



Image of Citroen Berlingo WAV (automotivegroup.co.uk)