

With Iveco upping the ante on its all-electric Daily LCV, operators with their eyes on green credentials might be tempted. Steve Banner checks out a 5.2-tonne crew cab version

veco is renewing attempts to convince UK operators of the virtues of the electric version of its Daily, with the availability of a right-hand-drive 5.2 tonne model, currently being homologated. Available in both van and chassis cab guise, it is powered by NaNiC1<sub>2</sub> (sodium nickel chloride) Zebra Z5 maintenance-free, molten-salt sealed batteries.

These are mounted beneath the cargo bed, and either three or four can be specified in parallel – fully-recharging from a three-phase supply in around eight hours. They drive an asynchronous electric motor with a peak power output of 60kW.

## Respectable power

Maximum torque is 230Nm and the 5.2-tonner claims a 56-mile range on three batteries. That distance increases to 75 miles for four batteries. Both range figures assume that the vehicle is fully-laden and on urban work. Maximum speed is an electronically-restricted 70km/h.

The automatic gearbox's lever communicates with the motor generator by means of the vehicle's CANbus system, and regenerative braking is fitted. When the accelerator pedal is released, prior to braking, the electric motor promptly turns into a generator and starts topping up the batteries. Energy recovered then increases when the brake pedal is depressed.

A display in the centre of the dashboard tells the driver: charge left, range remaining and the temperatures of the batteries – they reach a rather warm 300°C – and motor. Press a button and you engage an economy setting, which restricts acceleration and limits top speed, too. Turn the ignition key and the dash display illuminates; turn it further while keeping your foot on the brake and you are ready to move away. Flick the gear stick to the left into D, for drive, and you're off. The other settings are N (neutral) and R (reverse): a dashboard display keeps you informed.

I sampled a 3,950mm-wheelbase six-seater Daily 5.0C, with a 12.3m³ load area separated from the cab by a full-height mesh bulkhead. It enables a work crew plus a pile of equipment to be transported. Gross payload is 1,870kg: 635kg less than the equivalent diesel, thanks to the weight of







the batteries (three) plus the onboard charger.

So what is electric Daily like? Performance is sluggish, if you opt for 'economy' but improves noticeably when you switch to 'standard', which allows it easily to hold its own in traffic. The trade-off is between a longer range and better driveability, and most drivers will favour the latter, unless their allocated route gives them cause for range anxiety.

While there is little external noise – which means that pedestrians and cyclists may be unaware of the van's presence – in-cab noise levels are surprisingly high. The absence of decibels from a diesel engine means that other sources of noise are amplified. My demonstrator's bodyshell creaked constantly and the whine from the electric motor can become irritating.

However, electric Daily is biddable at low speeds. Furthermore, it rides and handles just as well as its diesel stablemate, which means it achieves a high standard for a vehicle of its size. But the painful bit is the price. Opt for three batteries and it will cost you \$50,000 while four will set you back \$60,000. And that is on top of the base vehicle list price.

So my demonstrator bore an eye-watering £84,290 price tag. Although negotiation should bring your invoice down several thousand pounds and it

may be possible to lease the batteries, nobody is going to pretend this is cheap. On the positive side, power costs a few pence per kilometre and there is no liability for Vehicle Excise Duty, London Congestion Charge or the charge some goods vehicles attract if they enter the London Low Emission Zone. Also, the absence of a diesel engine means maintenance costs are greatly reduced.

The batteries should last five years but changing them will set you back £30,000 at today's prices, depending on how many you need. However, Iveco expects that to fall between now and 2018 as all-electric becomes more popular and economies of scale prevail. Electric 3.5-tonne Dailies are available, too, and may be eligible for an £8,000 Plug-in Van Grant, which will reduce the price.

Verdict: while opting for an electric Daily will undoubtedly burnish your green credentials, the low emission levels achieved by modern engines, plus their frugality, means that diesels are also greener. Electric Daily could be useful for niche applications – running a cross-town shuttle service between one NHS hospital and another, for instance – but, even on local delivery work, the flexibility of diesel still makes it the best bet for most operators.

