



CAZualty?

The spread of clean air zones has begun to have an impact on the used coach market. Approved retrofit emissions systems exist for only four engine types. CAZs are forcing medium-sized coach operators between a rock and a hard place, finds Peter Shakespeare

Over the next three years, around 17 cities in England will implement a city centre CAZ (clean air zone). In Scotland, Glasgow plans to extend its emissions rules for buses to all vehicles by 2022 and Edinburgh, Aberdeen and Dundee have CAZs under consideration. The Welsh government is seeking views.

Following London's lead, most CAZs will levy a daily charge for non-Euro VI compliant vehicles to enter. For coaches and HGVs, proposed charges range from £50 to £100 per day.

The size of the coach parc in the UK is comparatively small and operated by around 560 firms. Over 50% of these operate fewer than eight vehicles. At current replacement rates, it is estimated that around 75% of coaches in the UK are Euro V or older. Retrofitting emissions reduction technologies can bring some of these vehicles up to

Euro VI PM and NOx levels, under the Energy Saving Trust's Clean Vehicle Retrofit Accreditation Scheme (CVRAS). However, CVRAS accreditations only exist for four coach engines: Volvo D9B, Scania DC9, DAF PR265 and Mercedes OM457. This shortfall is blamed on lack of demand, resulting in limited emission reduction manufacturer R&D.

One customer explains how it chose between retrofit and replacement options. Lucketts Group's Mark Jordan, group engineer, says: "When the London ULEZ first affected our operation, we took a look at our vehicle fleet in terms of what Euro VI vehicles we had, and what the renewal plan was." The company's main operating base is in Fareham, Hampshire, and it also has operations in Southampton (Coliseum Coaches), Bournemouth (Solent Coaches), Worthing (Worthing Coaches) and Basingstoke (Mortons).

He continues: "We do a large contract

for National Express, which terminates in London. We therefore renewed the entire 21-vehicle National Express fleet, taking it from Euro V to Euro VI in the space of six months. As London is the only city in the UK that currently affects us, we can manage the ULEZ by the correct allocation of vehicles.

"We have another 129 vehicles in the group and the greater percentage are not Euro VI, so we decided to go down the retrofit route. We were the first operator to convert a Euro V coach to Euro VI using the EminoX conversion. Now we have completed these conversions, we have one of these vehicles at each of our depots. All the vehicles we converted were Volvo B9Rs."

Jordan estimates that the coming CAZ restrictions will have a significant effect on its operations. He says: "Portsmouth is consulting on a CAZ currently, and going in and out of the city is a large part of our business. We



also do a lot of cruise ship work taking passengers into Southampton.

"The biggest effect we foresee is the capacity to convert vehicles. We will not be alone in having Euro V vehicles that we cannot afford to sell, because the impending introduction of clean air zones has caused the bottom to fall out of the used coach market for Euro IV and Euro V vehicles. The way around this is to get them converted, which increases their residual value, making them saleable. But currently there is a limited choice of vehicles to be converted."

At nearly £20,000 per conversion, operators will only do it if they have to, contends Jordan. He worries that as additional cities roll out clean air zones, demand for conversions will ramp up rapidly, resulting in long lead times.

According to Jordan, the cost may be prohibitive for small operators. "The vast majority of coaches are operated by small companies with anything from one to eight vehicles in their fleet. Many of these will be unaffected by the clean air zones and if they have to enter them, it is likely they will simply pay the daily charge and pass the cost on to the passengers. This somewhat defeats the object of these zones, but for small operators, the cost of conversion, or a new vehicle replacement, is not worth the investment, given they will rarely see any benefit."

At the other end of the scale, National Express says that its fleet won't require retrofitting. "The average age of a National Express coach is three years,

and any vehicles purchased since summer 2014 meet Euro VI emissions standards. To date, 80% of our fleet of vehicles is Euro VI, so we do not have any requirement for retrofitting," says its UK coach head of media Paula Mitchell.

From the point of view of one retrofitter, Eminox, the coach experience stands in opposition to that of London bus fleets (see pp28-29). Unlike them, only a small number of coach operators have committed to retrofit so far. It blames low demand, plus the high cost of development and approval for retrofit upgrades, for the lack of provision of many retrofit options for coaches. The difficulty is that coaches are produced in relatively small volumes and design details may vary significantly within model ranges. So, producing retrofit equipment for all the variants that are in service is not financially viable for suppliers. However, it has launched a model for the Tourismo (above) and is seeking approval for retrofit solutions for Volvo B12 and DAF MX-13 and PX-9-powered Van Hool coaches.

A spokesperson adds: "Operators of less common vehicles may find that joining forces with others who have the same vehicle type could be a way of getting their vehicle onto development programmes at a sensible cost."

So, the roll out of CAZs across the UK promises to become a headache for affected coach operators. The best way to ease the pain is to heed the advice and take some action now, before the inevitable last-minute rush. **TE**



CLEAN AIR ZONES

The government mandated five cities to introduce a clean air zone (CAZ) this year. These were Birmingham, Leeds, Nottingham, Derby and Southampton. In addition, it also named 23 local authorities that must perform a feasibility study as it expects pollution levels to reach illegal levels by 2021. The current situation is summarised below.

ENGLAND

- Bath - CAZ expected end 2020. Coach/HGV charge £100 per day
- 📍 Birmingham - CAZ by summer 2020. Coach/HGV charge £50 per day
- Bristol - City centre ban expected March 2021 for all diesel vehicles. Outer charging zone for non-Euro VI
- Cambridge - CAZ expected, date TBC
- Coventry - CAZ cancelled
- 📍 Derby - Now not expected
- 📍 Leeds - CAZ September 2020. Coach/HGV charge £50 per day
- Leicester - Possible from summer 2021
- London ULEZ - Since April 2019; Euro VI compliance from 26 October. Coach/HGV charge £100 per day
- Liverpool - Expected, date TBC
- Manchester - CAZ under consideration
- Newcastle - CAZ expected 2021
- 📍 Nottingham - Cancelled
- Oxford - Zero EZ city centre (see article)
- Portsmouth - CAZ under consideration
- Sheffield - CAZ expected early 2021
- 📍 Southampton - Since 2017, but non-charging with incentive schemes
- York - CAZ expected 2020, initially only buses and taxis

SCOTLAND

- Aberdeen - Under consideration
- Dundee - Under consideration
- Edinburgh - Under consideration
- Glasgow - Buses only; all vehicles from 2022

WALES

Government is seeking views

Source: Fleet News (www.is.gd/keresa)