

Birmingham City's Clean Air Zone

With Birmingham City planning to bring in their 'Clean Air Zone' (CAZ) next year and the consultation period just coming to an end, it seemed like a good time to look at what this all means for the people who live and work in and around the city. A date has not yet been announced for the start of the CAZ, but it's



expected to come into effect in July 2020 (or later if the necessary technology is further delayed).



The primary reason for the Clean Air Zone is to **reduce levels of Oxides of Nitrogen** in the air to $40\mu g/m^3$ (40 micro grams per cubic metre) or less. These NO_x pollutants are produced by both petrol and diesel vehicles, but diesel engines produce about ten times as much, which is why they have come under such criticism lately. NOx is a particularly harmful pollutant causing serious respiratory problems, impaired lung function, headaches, poor appetite and even corrosion of teeth.

The Charges

Older, more polluting vehicles will be charged to enter the Clean Air Zone.

The hope is that these charges will discourage people from bringing these vehicles into the city and encouraging the change to newer, cleaner vehicles. The charge will be: -

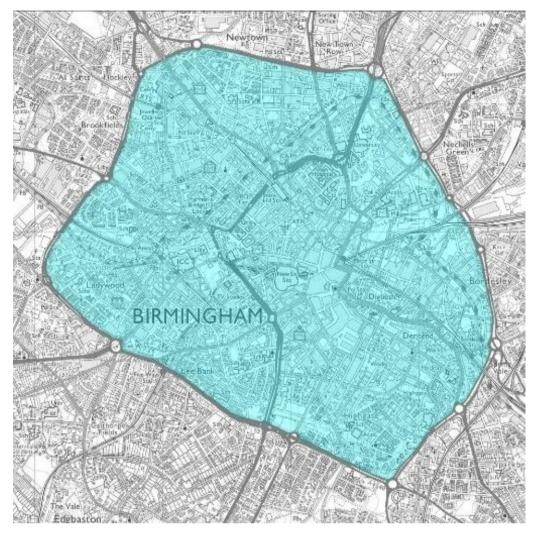
- £8 per day for cars, vans, taxis, etc.
- £50 per day for buses, coaches and Large Goods Vehicles.

There will be no charge for: -

- Motorbikes, mopeds, scooters
- Diesel or diesel-hybrid cars which comply with Euro 6,
- Petrol or petrol-hybrid cars which comply with Euro 4,
- Fully electric or hydrogen fuel cell vehicles
- Commercial vehicles which comply with Euro VI



Where will the charges apply?



The zone includes the area within the Middleway Ring Road A4540. The ring road itself is not included.

Map © Crown copyright and database rights 2019 Ordnance Survey 100021326lea

Exempt vehicles

Certain limited exemptions will be available for people who live within the zone or travel to work within the zone. Conditions and time limits apply to these exemptions. In certain circumstances, financial assistance is available and further details can be found here on Birmingham's website.

Certain specific vehicles are also exempt, such as historic vehicles and disabled passenger tax class vehicles. Again, see <u>Birmingham's website</u> for further information.

Retrospective upgrade to Euro 6

It is possible to upgrade a non-compliant vehicle to meet Euro 6 diesel or Euro 4 Petrol emission standards in accordance with the 'Clean Vehicle Retrofit Accreditation Scheme' (CVRAS). However, for cars, this will not be economically viable as it will be cheaper to replace a car with a compliant model such as a used, Euro 4 petrol car.

It will probably also be cheaper to replace Euro 4 or Euro 5 vans with compliant models rather than convert them to Euro 6. Retrospective upgrade might be a viable option for some specialist vehicles with expensive conversions. More information can be found on the CVRAS website.

Implications for remapping your vehicle

A good quality remap will keep your vehicle within its legal emissions limits and within the requirements for the Euro classification it was given when it was built and should not cause any issues. However, we have seen some very poor quality remaps and several remaps which have been written to extract the maximum power from an engine without any regard for its emissions (or its reliability and longevity). As always, you should only get your vehicle remapped by a reputable tuning business who can provide remaps which maintain low emissions and preserve the reliability of your engine. Regardless of the quality of the remap, removing any of the vehicle's emission control equipment will take your vehicle well outside its legal emission limits and will render it illegal to drive on the road under Construction and Use Regulations 61a(3)1.

For this reason, we do not offer any of the following services for road going vehicles: -

- EGR deletion Exhaust gas recirculation gives significant reduction of NO_x emissions. EGR deletion on Euro 5 or 6 vehicles will also result in premature failure of the DPF.
- DPF deletion Since May 2018 stricter MOT regulations mean that no vehicle which was designed to be fitted with a DPF will fail its emission test and fail the MOT.
- Adblue deletion Adblue systems are very commonly used to enable diesel vehicles to reach Euro 6 emission standards by further reducing NO_x emissions. More info can be found in our article on <u>AGR and Adblue</u>.

Conclusion

Clean Air Zones and Low Emission Zones are going to become more common and if you're going to be using a diesel car or van, then anything less than Euro 6 is going to become quite limiting. Obtaining a Euro 4 petrol engine vehicle could be a low cost alternative to a pre- Euro 6 diesel engine vehicle. Although petrol engines give poorer fuel economy than diesel, later direct injection petrol engines such as VW's TSI engines and Ford's Ecoboost engines can give fuel economy approaching that of a diesel engine and usually comply with Euro 5 or 6.

So if you're planning on changing your vehicle any time soon, you should be looking at getting a Euro 6 diesel engine or Euro 4 petrol engine as a minimum. You may even consider a zero emission vehicle such as a fully electric vehicle. However, this would be a decision which, at the moment, would need very careful consideration indeed.

Jeremy Howell, Aug 2019



Find out about remapping your vehicle

https://www.halesowenengineremap.co.uk/blog/#clean-air-zone