Taxi & Private Hire Vehicles Emissions & Subsidised Licence Fees

Date: 4 June 2025
Team: Climate Action Team

1. Summary and Recommendation

At the national level, there are polices in place to phase out the sale of new petrol and diesel vehicles to reduce carbon emissions, enhance air quality, and facilitate the transition to a more sustainable transport system.

Locally, while the aspiration is to achieve the best possible air quality, it is not considered a primary concern at present, as current levels remain well within UK air quality standards. Instead, the local focus is on promoting the reduction of carbon emissions.

Based on the research and evidence gathered, the following recommendations are proposed for an incentive structure aimed at encouraging the adoption of a greener Taxi and Private Hire Vehicle fleet in Stevenage.

- A 2-tiers discount structure for zero and Ultra Low Emissions Vehicles
  A larger discount (50% off) for zero emissions vehicles and a smaller discount (25% off) given for Ultra Low Emissions Vehicles, which defined as vehicles that have a CO2 emissions of 50g/km or lower.
  Note: the CO2 emissions rate found on the Vehicle Certification Agency or Driver and Vehicle Licensing Agency website or letter from the car manufacturer.

- Specify an end date for the incentive.
  Recommending the discounts apply till end of 2030 to align with the council's zero emissions ambition and the national policy of ending the sale of new petrol and diesel cars.

2. Introduction

In its most recent update of the *Hackney Carriage and Private Hire Licensing Policy*, Stevenage Borough Council gave careful consideration to the recommendation set out in the Department for Transport's Best Practice Guidance. In particular, the Council recognised the need to adopt more stringent emissions standards for all licensed vehicles, reflecting its responsibility in protecting the environment, especially the local air quality, and its commitment to achieving net zero emissions by 2030.

To support this objective, the policy now requires all newly licensed vehicles to meet at least Euro 5 emission standards. In doing so, the Council has sought to strike an appropriate balance between environmental protection and the need to maintain an adequate supply of licensed vehicles across the borough.

The Council is also mindful of the UK Government's intention to introduce a ban on the sale of new petrol and diesel cars by 2030, and followed by the ban of new hybrid cars in the UK by 2035 at the latest. While the Best Practice Guidance acknowledges that older cars can be well maintained and suitable for continued use, the Council has also recognised that older cars tend to have a less efficient engine and hence a higher air pollutants and carbon emissions that would affect its environmental concerns and climate targets. As such, to meet the Council's objectives, vehicles will be required to meet an age criterion to remain licenced. As a result, from 1 February 2025, all licenced vehicles that were classed as Euro 4 were no longer eligible for new licenses or renewal.

In line with its wider environmental ambitions, the Council strongly encourages the transition to cleaner, low-emission vehicles for use as taxis and private hire vehicles. To support this transition and incentivise uptake, the Council intends to introduce a subsidised licence fee for electric and hybrid vehicles. This paper sets out how best to implement this reduction in licensing fees to ensure it is fair, effective, and aligned with the Council's environmental targets.

3. Air Quality

3.1. Legal Framework

In the UK, outdoor air pollutant concentrations are governed by the Air Quality Standards Regulations 2010, which establish legally binding limits and targets for key pollutants. These include sulphur dioxide (SO_2), nitrogen oxides (CO_2), particulate matter (PM_{10} and $PM_{2.5}$), lead, benzene, carbon monoxide (CO), ozone (O_3), and toxic metals such as cadmium, arsenic, nickel, and mercury.

When pollutant levels exceed these limits, authorities are required to publish Air Quality Plans aimed at reducing concentrations as quickly as possible. The regulations specify limit values, target values, and long-term objectives for each pollutant.

In contrast, the World Health Organization (WHO) provides more stringent air quality guidelines. These are based on the latest scientific research and are intended to minimise health risks associated with air pollution. However, unlike UK regulations, the WHO guidelines are not legally binding.

Pollutant	Averaging Period	UK Objective/Limit	WHO Guideline

Nitrogen Dioxide (NO_2)	1 hour	200 µg/m^3 (not to be exceeded more than 18 times/year)	
	24 hour		25 µg/m^3
	Annual Mean	40 µg/m^3	10 µg/m^3
Particulate Matter (PM_{10})	24 hour	50 µg/m^3 (not to be exceeded more than 35 times/year)	45 µg/m^3
	Annual Mean	40 µg/m^3	15 µg/m^3
Particulate Matter ($PM_{2.5}$)	Annual Mean	20 µg/m^3 (since 2020)	5 µg/m^3
	Target (by 2040)	10 µg/m^3	
Ozone (O_3)	8 hour mean	100 µg/m^3 (not to be exceeded more than 10 times/year)	100 µg/m^3
Sulphur Dioxide (SO_2)	15 minute	266 µg/m^3 (not to be exceeded more than 35 times/year)	
	1 hour	350 µg/m^3 (not to be exceeded more than 24 times/year)	
	24 hour	125 µg/m^3 (not to be exceeded more than 3 times/year)	40 µg/m^3
Carbon Monoxide (CO)	Maximum Daily 8-hour Mean	10 mg/m^3	
	24 hour		4 mg/m^3
Benzene	Annual Mean	5 µg/m^3	
Lead	Annual Mean	0.25 µg/m^3	

3.2. Local Air Quality in Stevenage

An air quality monitoring station located at Stevenage St Georges Way South measures two key pollutants—nitrogen dioxide (NO_2) and particulate matter (PM2.5) in an urban traffic environment. Between 2022 and 2024, a downward trend has been observed in the maximum daily mean, annual maximum, and annual mean concentrations for both NO_2 and PM2.5.

During this period, there have been no exceedances of the UK Air Quality Strategy Objectives for NO_2 annual mean, NO_2 hourly mean, or $PM_{2.5}$ annual mean in Stevenage.

However, when compared to the World Health Organization (WHO) air quality guidelines, the annual mean concentrations of NO_2 and $PM_{2.5}$ in Stevenage remained slightly above recommended levels over the past three years. In 2024, the annual NO_2 concentration was 4 µg/m^3 while the annual concentration of $PM_{2.5}$ was 3 µg/m^3 higher than the WHO guidelines.

While the WHO guidelines are not legally binding in the UK, they are often referenced in the media and by local environmental groups [ref: Stevenage: Air pollution causes one in 20 deaths in town | The Comet ,Air pollution in Stevenage is 'well over WHO health limit' | The Comet].

	NO_2 µg/m^3			PM_{25} µg/m^3		
	2022	**2023**	**2024**	**2022**	**2023**	**2024**
Number Days Low	359	346	359	353	331	350
Number Days Moderate	0	0	0	1	0	0
Number Days High	0	0	0	0	0	0
Number Days Very High	0	0	0	0	0	0
Max Daily Mean	64	54	44	42	35	25
Annual Max	105	88	74	88	115	57
Annual Mean	19	18	14	9	7	8

3.3. Air Emission Standards for passenger vehicles

The Euro emissions standards are regulations set by the European Union to limit the amount of harmful air pollutants vehicles emit. These standards apply to new vehicles sold in the EU and aim to improve air quality and reduce pollution from transport. The Euro standard emissions rating of a vehicle can be found in the V5C logbook of the vehicle.

The standards set maximum limits for carbon monoxide (CO), nitrogen oxides (NOx), particular matter (PM), Particle number (PN), and Hydrocarbons (HC).

Standard	Introduced	CO (g/km)	NOx (g/km)	PM (g/km)	PN (particles/km)	Notes
Euro 4	Jan 2005	Petrol: 1.0 Diesel: 0.5	Petrol: 0.08 Diesel: 0.25	Petrol: Not regulated Diesel: 0.025	Not regulated	First to require PM filters in diesel

Euro 5	Sept 2009	Petrol: 1.0 Diesel: 0.5	Petrol: 0.06 Diesel: 0.18	Petrol: 0.005 (for DI only) Diesel: 0.005	Diesel: 6.0×10^{11}	Introduced PN limits; stricter NOx & PM
Euro 6	Sept 2014	Petrol: 1.0 Diesel: 0.5	Petrol: 0.06 Diesel: 0.08	Petrol: 0.005 (for DI only) Diesel: 0.005	Petrol (DI) & Diesel: 6.0×10^{11}	Much stricter NOx for diesels

4. Carbon Emission

The carbon dioxide (CO_2) emissions from vehicles are determined by the amount of fossil fuel it burns, which is directly related to its fuel consumption. According to the UK Greenhouse Gas reporting conversion factors (2024), the average biofuel blended diesel in the UK emits 2.51 $kgCO_{2e}$ per litre while the average biofuel blended petrol emits 2.08 $kgCO_{2e}$ per litre.

The amount of fuel a car burns, and, in turn, CO_2 emissions, is dependent on both technical and driving factors. Key technical aspects include engine efficiency, vehicle weight, aerodynamics, tire rolling resistance, and transmission type—all of which affect how much energy the car needs to operate. Driving behaviour also plays a major role: aggressive acceleration, speeding, excessive idling, and frequent stop-starts increase fuel consumption. Road conditions, traffic, and use of features like air conditioning can further impact emissions.

For technical relate emissions, cars that were first made available on the market after the 1st September 2019 were subjected to test under the Worldwide Harmonised Light Vehicle Test Procedure (WLTP), a laboratory-based testing system to measure fuel consumption, CO_2 emissions, and other pollutant emissions. It provides model-specific values for fuel consumption and CO_2 emissions at the point of sale. The emissions information on a vehicle can be found on the Vehicle Certification Agency website - Select a search : Directgov - Car fuel data, CO2 and vehicle tax tools or the Driver and Vehicle Licensing Agency website - Check if a vehicle is taxed - GOV.UK

For emissions related to driving behaviour and road conditions, it is hard to monitor and regulate.

5. Emissions standards for Private Hire Vehicles and Hackney Carriage in other Local Authorities

Examples of current and near future policies related to the emissions of PHV and/or Hackney Carriage at other local authorities, including London, Reading, and Cambridge.

5.1. London (Transport For London)

For PHV

- All PHVs licensed for the **first time** must meet the Euro 6 emissions standard and be zero emission capable, meaning
  1. Emit no more than 50g/km CO_2 and be capable of being operated with zero exhaust emissions for a minimum range of 10 miles **OR**
  2. Emit no more than 75g/km CO_2 exhaust emissions and be capable of being operated with zero emissions for a minimum range of 20 miles
- Vehicles **already licensed** by TfL must be no older than 10 years at time of re-licensing
  if the vehicles do not meet the standards below, will have to pay a £12.5 charge per day, unless they are registered as wheelchair accessible (exempt until 26 October 2025)
  1. Petrol cars, vans and minibuses must be Euro 4
  2. Diesel cars, vans and minibuses must be Euro 6

Note: CO2 exhaust emissions need to be confirmed by V5C and the electric range and Euro emission standard by the Manufacturer's Certificate of Conformity

For Taxi

- All new taxi licensed for the **first time** must have a Euro 6 Petrol engine and be Zero Emission capable - Emit no more than 50g/km CO_2 and be capable of being operated with zero exhaust emissions for a minimum range of 30 miles
- Age Limits: The maximum operating age for taxis is 15 years. However, between November 2020 and November 2022, the age limit for Euro 3, 4, and 5 diesel taxis was reduced by one year each year.
- LPG Conversions: Eligible Euro 5 diesel taxis can be converted to Liquid Petroleum Gas (LPG). These converted taxis can retain the 15-year maximum operating age limit.

Incentive

TfL is helping to fund a government-led plug-in vehicle grant, which will give taxi drivers up to £7,500 off the price of a new ZEC taxi.

5.2. Reading Borough Council

For Taxi

Currently

- Only vehicles that are less than 8yrs old from new will be licensed.
- Diesel, electric and ZEC vehicles are licensable but only for vehicles that are a minimum of Euro 5a will be licensed

From 1st October 2025

- All Replacement vehicles are a minimum ULEV and less than 8 years old. This rule will apply regardless of whether the vehicle is new or an existing vehicle

From 1st October 2028 and will run till 2035 unless reviewed sooner

- All replacement vehicles shall be a minimum of ULEV and less than 7 years old. This rule shall apply regardless of whether the vehicle is new to fleet or an existing vehicle being transferred within the fleet.
- Age limits for ULEV vehicles shall be set at a maximum of 15yrs and then removed from the fleet. Each vehicle shall be assessed on its own merit and an extension of up to a maximum of 3 additional years may be granted on renewal of the licence after a successful RBC compliance test.

Incentive

3.4. The Council have been offering the following incentives for those upgrading their vehicles:

Date	Incentives
From 1 April 2020 Ultra Low Emissions Vehicle (ULEV)	All ULEV (CO2 <50g/km emissions) pay a 25% reduction in the annual standard vehicle fee. £336 - 25% = £252 100% electric vehicles will receive a 50% reduction in the annual standard vehicle fee.
Offer extended until (ended on) 1 October 2023	Any ULEV/100% electric vehicle that has never been on the fleet before receives a free licence for its first year on the fleet.

3.5. Although the offer officially ended on 1 October 2023, officers have been continuing with it and propose it continues until 2028 when all vehicles will be a minimum ULEV compliant.

5.3. Cambridge City Council

Take effect from 16th September 2024 and will remain effective for a maximum period of 5 years
For PHV and taxi

Currently

- All new licensed saloon vehicles to be zero or ultra low emission (less than 75g/km CO2 and have a taxation class as alternative fuel) and meet the Euro 5 standard or higher
- A vehicle licence will not be renewed unless the vehicles is less than 11 years old, exemption applies to Zero emission vehicles that can have an age limit of up to 15 years
- Ultra-Low emission vehicles can have an age limit of up to 12 years

By December 2028

- All licensed saloon to be zero or Ultra low emission
- City Centre will restrict access to zero and ultra low emission licensed vehicles only

Incentive

- No maximum age limit for newly licensed ultra low and zero emission vehicles

With effect from 1 April 2018

- Full Licence Fee Exemption is available for Zero Emission Vehicles ONLY
- 50% Licence Fee discount is available for Ultra-Low emission vehicles

Other useful information and links

Low-emission vehicles eligible for a plug-in grant: Taxis - GOV.UK