

East Herts Council Report

Overview and Scrutiny Committee

Date of meeting: 20 September 2022

Report by: Oliver Rawlings (Service Manager – Licensing and Enforcement)

Report title: Licensed Vehicles Emissions Update

Ward(s) affected: All

Summary

- This report details the work already carried out in relation to the emissions created by the vehicles it licences, both hackney carriage and private hire vehicles, in pursuit of the Corporate Plan action for 2022/23 to ‘implement stricter taxi emission requirements for all new vehicle applications and renewal applications’. The report also discusses the council’s leading role in countywide work to limit the emissions from all the vehicles licensed by Hertfordshire districts.

RECOMMENDATIONS FOR OVERVIEW AND SCRUTINY

COMMITTEE: That

A. Members consider and endorse the approach being taken to limit the emissions from licensed vehicles.

1.0 Proposal(s)

1.1 That work is carried out to minimise the emissions from vehicles licensed by East Herts Council in support of the Corporate Plan.

2.0 Background

- 2.1 East Herts Council was an early adopter of considering emissions as part of the criteria for granting licences for hackney carriage and private hire vehicles.
- 2.2 Following consultation with the trade a 'Licensed Vehicle Age & Emissions Policy' was implemented from the 1st April 2019 with the standards coming into effect from 1st April 2020. Since that date, all vehicles licensed for the first time by the council for use as a licensed vehicle (hackney carriage or private) needed to meet or exceed the Euro 6 standard.
- 2.3 The Euro 6 standard is as follows:

Euro 6 standards for petrol engines:

- Carbon monoxide – 1.0g/km
- Total hydrocarbon emissions: 0.10g/km
- Non-methane hydrocarbon emissions: 0.068g/km
- Nitrogen oxides: 0.06g/km
- Particulate matter: 0.005g/km (direct injection only)

Euro 6 standards for diesel engines:

- Carbon monoxide: 0.50g/km
- Hydrocarbons and Nitrogen oxides: 0.17g/km
- Nitrogen oxides: 0.08g/km
- Particulate matter: 0.005g/km

- 2.4 In order to meet the Corporate Plan objective to 'implement stricter taxi emission requirements for all new vehicle applications and renewal applications' by the end of 2022/23 the switch to *all* licensed vehicles needing to meet the Euro 6 standard has been fully publicised across the local trade. From 1st April 2023 all vehicles to be licensed by East Herts will be Euro 6 or electric and the trade will be reminded of this. The decision to move to this emissions standard for all vehicles in 2023 was taken in 2019 after consultation with the trade.

- 2.5 In a further step to promote the uptake of electric vehicles by the licensed trade the licence fee due for an initial application was waived for a fully electric vehicle.
- 2.6 The fees for taxi licensing are required to be set at a level that allows cost recovery. Therefore where the fee is waived for a particular application this must be funded separately by the authority and cannot simply be added to the fees paid by other licence holders.
- 2.7 As other Hertfordshire local authorities have begun to consider the matter of vehicle emissions some have chosen to adopt the same policy as East Herts whilst others have chosen to adopt their own standards. This means that across the county vehicles have to meet different standards so a vehicle that might not be licensed by East Herts could gain a licence elsewhere within Hertfordshire and then still be working within East Herts.
- 2.8 Similarly vehicles licensed elsewhere in the country, including in London, can legally work within the district without meeting the locally set emissions standards.
- 2.9 To standardise the approach in the county, East Herts Council has been approached by the Hertfordshire Climate Change and Sustainability Partnership (HCCSP) to assist in accelerating the switch to increasingly lower emission taxis across Hertfordshire. This is due to East Herts Council's work in this area and the Service Manager (Licensing & Enforcement) chairing the Herts & Beds Licensing Group and, through this role, promoting joint working in taxi related areas.
- 2.10 In a recent report, The Low Emission Taxi Guide, the Carbon Vehicle Partnership and Energy Saving Trust, states: "Taxis have a disproportionate impact on air quality impacting human health. This is due to the relatively high mileage they

cover and their concentrations in busy urban areas such as railway stations, shopping malls and supermarkets where large numbers of pedestrians are present.

- 2.11 “Emissions produced by these vehicles not only have an impact on the health of the local population (almost all taxis and many private hire vehicles are fuelled by diesel) but also on ... drivers who may be exposed to poor air quality for 8-12 hours a day. Road transport (including local road traffic and road traffic background) is responsible for some 80% of nitrogen oxide (NOx) concentrations at roadside. Although diesel taxis are only responsible for 2% of the local road traffic NOx emissions nationally, this rises significantly in cities.¹

3.0 Reason(s)

- 3.1 Taxis traditionally have higher emissions, relative to other road transport, than their low percentage of vehicles on the road would suggest. This is because vehicles used as taxis spend a relatively high proportion of their time in use, as compared with many cars used simply for commutes during the week. Add to this, they emit even when unoccupied, travelling to or waiting for their next customer. As they often ply their trade in high population density areas, the detrimental effects of their emissions on air quality can also be disproportionately high.
- 3.2 There are currently 246 vehicles licensed by East Herts council and their emissions levels are shown below:

Type of vehicle licence	Overall number	Euro 5 or below	Euro 6 or above	Fully Electric Vehicle	% Euro 6 or electric
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¹ Gloria Esposito Low, Maria Siakovelli and Ian Featherstone (2018) The Low Emission Taxi Guide. London: Low Carbon Vehicle Partnership and Energy Saving Trust

Hackney Carriage	194	67	127	0	65.5%
Private Hire	52	12	38	2	76.9%
Total	246	79	165	2	67.9%

3.3 The 79 vehicles that are currently below the Euro 6 standard will all be considered when their licence comes up for review after 1st April 2023. The granting of licences to vehicles with a lower emissions standard will only be allowable as an exception to the 'Vehicle Age & Emissions Policy' after this date.

3.4 The county-wide work comparing emissions standards is taking into consideration moving towards newer and cleaner vehicles lower emission vehicles as well as promoting fully electric vehicles and includes:

- **“Low emission vehicle”** is defined as one that produces less than 100g of CO2 for every kilometre (0.6 miles) travelled.
- **“Ultra-low emission vehicle”** is defined as a vehicle that produce less than 75g of CO2 per kilometre travelled
- **Electric vehicles** or **“EV”**, as distinct from LEV above, can be divided into more categories and with wider availability than when the 'Vehicle Age & Emissions Policy' was drafted. **Hybrid vehicles (HV)**, which use a combination of combustion engine and battery (battery use being generally for speeds below 20 mph and having a range of around 5 miles), recharging the battery through the use of the combustion engine. It is a widely held misconception that the battery on these vehicles is recharged through regenerative braking when it is in fact recharged by the combustion engine revving slightly higher to drive a dynamo generator to recharge the battery; **plug-in hybrid vehicles (PHEV)**, which charge the battery through

a charging port and are capable of operating on battery power alone over shorter ranges (typically around 20 miles) and then using the combustion engine for higher speeds or when the battery is depleted; and **battery electric vehicles (BEV)**, which do not have a combustion engine and are driven from the battery alone

3.5 The table below shows the average CO₂E emissions per kilometre:

Type of vehicle	Average CO ₂ E emissions per kilometre ²
Petrol passenger car	174g
Diesel passenger car	168g
Hybrid passenger car	119g
Battery Electric passenger car	57.7g

3.6 HCCSP has agreed two actions in relation to taxis in its Strategic Action Plan for Transport approved November 2021: *T30 : Establish a coordinated approach between districts in terms of future taxi licencing policy to facilitate an accelerated shift to fully electric taxis being the norm across Hertfordshire*

T31: Develop a model “low carbon” taxi licencing policy for Hertfordshire districts to adopt if desired.

3.7 There are a range of positive outcomes to be enjoyed by local authorities, proprietors and operators and residents themselves of an increase in the number of LEV taxis.

3.8 The benefits to a local authority include:

- improved local air quality: Taxis frequently operate at transport hubs such as rail and bus stations and at other

² Statista (2021) *Carbon footprint of selected modes of transportation in the United Kingdom in 2021**(in grams of carbon dioxide equivalent per kilometer) Available online [here](#).

busy locations: their impact on local air quality and the public's exposure to air pollution is often greater than the overall number of vehicles in operation would suggest. These areas are often covered by Air Quality Management Areas (AQMAs) and so a coordinated policy could contribute to the success of the Air Quality Action Plan (AQAP) in those locations

- reduced greenhouse gas emissions from road transport: HCCSP's Strategic Action Plan for Transport indicates that 27% of the UK's CO₂e emissions are from transport, and of that, 91% is from road transport. Taxi emissions are a significant emitter in the local area and are an area that Authorities have an opportunity to use their statutory powers to impact upon
- potential positive impact on residents' health, reducing admissions to local NHS departments and Hertfordshire County Council care services.

3.9 The benefits for proprietors and operators include:

- no charge to enter a charging Clean Air Zone (CAZ), the Ultra-Low Emission Zone (ULEZ) or other regional Low Emission Zone (LEZ) that include taxis and private hire vehicles, which may expand potential operational footprint for taxis
- applying a whole life cost (WLC) analysis often shows that best-in-class vehicles are cheaper to operate than conventional and older technology vehicles
- grants (whether in place or in the future) could offer financial support and incentives to support the change
- possibility to benefit from local authority incentives such as reduced parking charges and priority use of taxi ranks
- licensing rules could possibly favour lower emission taxis in the form of new licence availability, licence fees or vehicle age policies. This will need to be subjected to a fuller review of the detailed legislation and guidance

governing the recovering of licencing authorities' costs through fees levied.

3.10 The benefits to customers and residents include:

- more comfortable journeys: Lowest emission vehicles may be more comfortable for the passenger and the neighbourhoods that they drive through, as hybrids (when running in electric drive mode) and electric vehicles are quieter and smoother than conventional cars
- greater population adoption of LEVs: Encouraging public purchase of LEV following positive experience of being driven in one
- increased convenience if low emission taxis can access priority taxi ranks and designated low emission bus lanes.

3.11 Whilst there are perceived barriers to the use of lower emission vehicles as licensed vehicles more work needs to be done around this. It is hoped to engage with the licensed trade across Hertfordshire and gather data on what the actual barriers are so that they can be mitigated as far as possible.

4.0 Options

4.1 Do not carry out work to try to minimise emissions from licensed vehicles – NOT RECOMMENDED: The Corporate Plan and East Herts Council's leading role in the HCCSP work demonstrates the Executive's wish to be at the forefront of this work.

5.0 Risks

5.1 If the authority does not seek to lower harmful emissions wherever possible there is a potential risk to health.

5.2 Failing to act to lower emissions where possible has a reputational risk for the council.

6.0 Implications/Consultations

Community Safety

Not applicable.

Data Protection

No changes are proposed to how data will be held or handled so no additional implications.

Equalities

Consideration has been given to the Equality Act 2010 and the Public Sector Equality Duty whilst drafting the Policy and an Equalities Impact Assessment was not considered necessary for the following reasons:

Negative Impacts

The council has not identified any negative effects from the proposed work on the promotion of lower emissions vehicles at this stage.

Positive Impacts

If the area of work helps to lower emission then any improvement in air quality will benefit those living, working and visiting East Herts.

Overall conclusion

The make-up of the licensed taxi trade in January 2022 was as follows:

Place of birth	Percentage
United Kingdom	58%
Bangladesh	8%
Pakistan	8%
India	3.6%
Poland	3.3%
Romania	3%

Turkey	3%
Lithuania	2.6%
Morocco	1.6%
Afghanistan	1.3%

The remaining 7.6% is made up of individuals who were born in 1 of 17 other countries which individually account for 1% or less of the total.

Those born abroad are over-represented within the taxi trade when compared with the overall East Herts population and so there is the potential that any economic impacts, such as the need to purchase a new car, could fall more heavily on people from different black and minority ethnic groups.

This potential differential impact should be borne in mind, however, it is argued that the wider benefits to be derived from promotion of lower emission vehicles, as described in paragraphs 3.8 to 3.11 of this report, are so significant as to outbalance the possibility of differential negative impacts. Furthermore, the council's policy on the licensing of taxi vehicles allows for a deviation from only licensing Euro 6 standard vehicles in exceptional circumstances. Therefore, the council has at its disposal a mechanism for obviating any substantially negative impacts on drivers from protected characteristic groups if/as necessary.

The impacts described will be kept under review, using up-to-date information regarding the licensed trade.

Environmental Sustainability

Improved local air quality: Taxis frequently operate at transport hubs such as rail and bus stations and at other busy locations: their impact on local air quality and the public's exposure to air pollution is often greater than the overall number of vehicles in operation would suggest. These areas are often covered by Air Quality Management

Areas (AQMAs) and so a coordinated policy could contribute to the success of the Air Quality Action Plan (AQAP) in those locations.

Reduced greenhouse gas emissions from road transport: HCCSP's Strategic Action Plan for Transport indicates that 27% of the UK's CO₂e emissions are from transport, and of that, 91% is from road transport. Taxi emissions are a significant emitter in the local area and are an area that Authorities have an opportunity to use their statutory powers to impact upon.

Potential positive impact on residents' health, reducing admissions to local NHS departments and Hertfordshire County Council care services.

Financial

Any incentives, such as waiving licensing fees for certain types of vehicle, will be a cost to the council as fees cannot be increased for other vehicles to cover this. Given the council's need to make significant savings over the medium term any budget for incentives would have to be funded from a budget reduction elsewhere.

Air pollution from vehicles impacts on other parts of the public sector, particularly the NHS and Social Care. In England, the total cost due to PM_{2.5} to the NHS and social care is estimated to be £1.5billion by 2025, and £5.1billion by 2035. This increases to £2.8billion and £9.4billion respectively when diseases with less robust evidence are included. the total cost due to NO₂ to the NHS and social care is estimated to be £60.8million by 2025, and £230million by 2035. This increases to £2.7billion and £9.2billion respectively when diseases with less robust evidence are included. Research by Oxford and Bath Universities from 2018 estimated that air pollution cost the NHS and wider society £6 billion per year. Breaking that figure down:

- Average cost to the NHS and society of a car is £7,714
- The health damage cost from diesel cars is £16,424
- The health damage cost from petrol cars is £2,327
- The health damage costs from petrol hybrid vehicles is £1,824

- The health damage costs from battery electric vehicles is £827

Nearly 90% of the total £6 billion bill caused by emissions to the NHS and wider society comes from the impact of diesel emissions. By reducing emissions in line with the policy the council will be assisting its partners in the NHS and Social Care to reduce future costs.

Health and Safety

None

Human Resources

None

Human Rights

As with all council functions, the Human Rights Act 1998 has been considered when drafting the report.

Legal

All statutory requirements have been considered in preparing this report.

Specific Wards

All

7.0 Background papers, appendices and other relevant material

None

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