

Regulatory Committee

2.30pm, Monday, 20 May 2019

Age Limitation and Emissions Standards for Taxis and Private Hire Cars - Update

Executive/routine

Wards

Citywide

Council Commitments

1. Recommendations

- 1.1 It is recommended that the Regulatory Committee:
- 1.1.1 Notes the contents of this report;
 - 1.1.2 Supports the proposals outlined in paragraph 4.8 and agrees that they will take effect from 1 July 2019;
 - 1.1.3 Notes the intention to delegate authority to the Executive Director of Place to approve exemptions to age and emissions policy in respect of owners retiring;
 - 1.1.4 Instructs the Executive Director of Resources to include this additional delegation in future drafts of the Council's Scheme of Delegation when submitted to Council for approval; and
 - 1.1.4 Agrees the draft changes to policy and conditions.

Paul Lawrence

Executive Director of Place

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Age Limitation and Emissions Standards for Taxis and Private Hire Cars - Update

2. Executive Summary

- 2.1 Following the decision of the Committee to introduce a Taxi and Private Hire Cars Age Limitation and Emission Standards policy, the Committee instructed the Executive Director of Place to monitor the ongoing implementation of this policy. This report provides the Committee with an update on the implementation of the policy, and advises on proposed changes to policy.

3. Background

- 3.1 The licensing of taxis and private hire cars (PHCs) is an optional activity in terms of the Civic Government (Scotland) Act 1982 ('the Act'). The City of Edinburgh Council, as Licensing Authority under the Act, passed a resolution in terms of Section 9 of the Act that Sections 10 to 23 of the Act shall have effect throughout the city, and that licences shall be required for taxis and PHCs from 1 July 1984 ('City of Edinburgh Taxi and Private Hire Car Driving Resolution 1983').
- 3.2 Section 10 of the Act requires the licensing authority to be satisfied as to the suitability in type, size and design of a vehicle for use as a taxi or PHC before granting or renewing a taxi or PHC licence.
- 3.3 In terms of the Act, when granting or renewing a licence, in addition to any mandatory or standard conditions to which the licence is subject, the licensing authority may (a) disapply or vary any standard conditions so far as is applicable to the licence; and (b) impose conditions. The conditions shall be such reasonable conditions as the licensing authority thinks fit.
- 3.4 On 16 March 2016 the Regulatory Committee agreed:
- 3.4.1 a revised policy on Taxis and Private Hire cars, outlined in Appendix 1, which took effect from 7 May 2018, which:
 - 3.4.1.1 introduced an age limitation in respect of taxis and PHCs; and
 - 3.4.1.2 will incrementally increase the minimum emissions standards for the engines in these vehicles, which will improve emissions standards;

- 3.5 The Committee instructed Council officers to monitor the ongoing implementation of this policy, and if any unforeseen issue arise to report these back to the committee, so that it could consider any modifications of the policy which would assist with its ongoing implementation.

4. Main report

- 4.1 The Council previously updated standard licensing conditions for taxi and private hire car vehicles and drivers in 2016. These conditions were further updated following the decision of the Regulatory Committee to introduce a Taxi and Private Hire Cars Age Limitation and Emission Standards policy and conditions (Appendices 1 and 2)
- 4.2 The latest policy milestone was **effective 1 April 2019**, when no Taxi or PHC would be accepted for licensing as a Taxi or PHC or as a replacement vehicle for an existing taxi or PHC licence unless it is a minimum of Euro 5. Any Euro 0-4 taxi or PHC for which an application to renew a licence was made prior to 1 April 2019 may continue to be operated until its licence expires.
- 4.3 The Licensing Service has received approximately 306 applications to vary licence conditions of Taxi or Private Hire Car Licences since this change in policy. These are referred to the committee to determine whether in each case an exemption to the policy should be made, and the relevant licence should be granted with an exemption to the relevant conditions. There are currently 52 appeals still to be heard. To date 112 variation applications have been refused and 131 granted. 113 were given an extension of 1-2 years; 15 were given an extension of 2-3 years; and three were given an extension of 3 years or more.
- 4.4 Approximately 530 vehicles have already been upgraded to meet the new conditions, which indicates that a proportion of the trade is already working to meet the terms of the policy.
- 4.5 The Committee instructed Council officers to monitor the ongoing implementation of this policy, and should any unforeseen issue arise to report these back to the committee, so that it could consider any modifications of the policy which would assist with its ongoing implementation

Retirement policy

- 4.6 A number of vehicle owners have had a request for exemption to policy heard, and during the hearing have indicated that they intend to retire within the next 1-2 years. The committee has generally been sympathetic to these requests and has granted a number of exemptions.
- 4.7 It is proposed that owners seeking an exemption to policy on the basis of retirement could be dealt with by Council officers under delegated authority, subject to strict criteria. If considered appropriate it is proposed that:

- 4.7.1 Individual owners could be given an exemption of up to a maximum period of one year;
 - 4.7.2 Owners would have to provide a written declaration that it was their intention to retire and the intended date of retirement;
 - 4.7.3 Only one exemption can be dealt with under delegated authority and any further requests are referred to the committee.
- 4.8 It is acknowledged that circumstances can change, and any change to retirement plans would be referred back to the committee for further consideration. In addition, any evidence of bad faith would be referred back to the committee with an immediate request to vary terms of the licence. This may also be considered in the context of an owner's suitability in terms of the fit and proper test.

Euro 5s

- 4.9 The first policy milestone took effect on 1 October 2018, from which date no taxi or PHC would be accepted for licensing as a taxi or PHC or as a replacement vehicle for an existing taxi or PHC licence unless it is a Euro 6. This prevents Euro 5 or lower vehicles which are not already part of the current City of Edinburgh licensed fleet of vehicles from being tested and licensed. Members will recall that there was evidence that a number of licensed taxi operators were replacing vehicles by purchasing older second hand taxis, which were no longer suitable for licensing in the authority in which they were originally licensed. These second hand vehicles had become available because they failed emission or age standards in those authorities, e.g. London/Birmingham. This measure therefore prevented a short term increase of vehicles which would require to be further replaced when this Council's higher emission standards took effect
- 4.10 The latest policy milestone was **effective 1 April 2019**, after which date no taxi or PHC would be accepted for test unless it is Euro 5 or above. Any Euro 0-4 taxi or PHC which has passed its test and is licensed prior to 1 April 2019 may continue to be operated until its licence expires.
- 4.11 The taxi trade has advised that only a small number of owners are able to finance and purchase brand new vehicles. This has a direct impact of the availability of second hand vehicles, and as a result of the implementation of the policy in October 2018 the availability of Euro 5 vehicles from within the existing fleet is problematic. The number of Euro 5 taxis available for purchase is significantly lower than the required demand to meet the emissions standards. As a result this has created a false market value for vehicles. The trade has asked that consideration is given to relaxing the current policy and allowing the purchase of Euro 5 vehicles from outwith the existing fleet. This would apparently stabilise the aftersales market and create greater availability of suitable vehicles in the short term.
- 4.12 It is proposed by Council officers that the policy that took effect on 1 October 2018 (no taxi or PHC to be accepted for licensing as a taxi or PHC or as a replacement vehicle for an existing taxi or PHC licence unless it is a Euro 6) should be amended to give a date of 1 April 2020. This would allow a number of drivers to make the

necessary step change to achieving full compliance with the policy by 2022. This is a proportionate measure, responding to what is known about the impact of implementation on the trade and availability of vehicles.

Electric Vehicles

- 4.13 The profile of electric vehicles (EV) is now growing and is seen as a contributor to reducing carbon emissions and improving air quality. There are currently 27 LEVC brand vehicles licensed as taxis in Edinburgh; two Tesla vehicles and 16 Nissan Leaf vehicles licensed as Private Hire cars
- 4.14 LEVC (formerly known as the London Taxi Company) is the only company currently supplying a purpose built taxi. The vehicle has been well received in Edinburgh and a number of new LEVC vehicles have already been licensed. The LEVC TX is powered by a full-electric hybrid drivetrain. It continuously drives in full-electric mode, but is recharged by 1.5-litre turbocharged three-cylinder petrol engine. This is the only purpose built 'electric' taxi that is currently available on the market
- 4.15 The taxi trade has highlighted concerns about the current EV infrastructure and the availability of charging points.
- 4.16 The City of Edinburgh Council is committed to improving EV infrastructure, and an EV Action Plan has been designed to increase charging infrastructure across the city and to encourage the uptake of EVs. The EV Action Plan is overseen by the Transport and Environment Committee
- 4.17 Regulatory Committee members were keen to encourage conversion to Electric Vehicles and Council officers were asked to consider measures that would provide some form of incentive. It is proposed that the current policy and conditions be amended **effective 1 April 2020** to allow any electric taxi or PHC, which is not a hybrid vehicle, to be an exception to the 10 year age limit and allow an additional four years of operation. Subject to meeting normal conditions about roadworthiness and ongoing six monthly compliance test from the vehicle's 10th anniversary, this will allow a vehicle to be submitted for test prior to the 14th anniversary of its registration for renewal of licence and can continue to operate until the expiry of that licence period.

Hybrid Vehicles

- 4.18 Hybrid cars have electric elements to their powertrains, but cannot be considered 'electric cars' due to the presence of a petrol engine. The term 'hybrid' is technically quite vague (Appendix 3), but in the context of cars almost always refers to a petrol-electric powertrain. This means that the car uses a combination of electricity stored in batteries and petrol stored in a tank to propel the car forward.
- 4.19 At the time of manufacture/registration hybrid cars will all have a Euro rating which reflects the vehicle's emissions level. It is therefore not proposed to make any changes to the policy in this regard.

LPG Vehicles

- 4.20 Prior to 2018, licensing conditions prevented the use of LPG vehicles and they had never previously been considered appropriate for licensing. The hire trade expressed an interest in allowing existing taxis to be converted to LPG vehicles. The committee agreed that any existing vehicle licensed by the Council can be adapted to Euro 6 or converted to LPG, provided that the following can be shown by the operator and that any modification is carried out at the owner's risk:
- 4.20.1 it is assessed as safe by the Taxi Examiner; and
- 4.20.2 it is accompanied by an approval certificate obtained from the Driver and Vehicle Standards Agency (DVSA).
- 4.21 The scheme of delegation does not allow Council officers to approve vehicle conversions, and all applications to convert existing vehicles will be referred to the committee for consideration.
- 4.22 In line with the approach for electric vehicles set out above, such conversion should be subject to meeting normal conditions about roadworthiness and ongoing six monthly compliance test from the vehicle's 10th anniversary of registration. This will allow a vehicle to be submitted for test prior to the 14th anniversary of its registration for renewal of licence and can continue to operate until the expiry of that licence period.

Retro Fit/Replacement engines

- 4.23 The committee previously agreed that any existing vehicle licenced by the Council can be adapted to Euro 6 or converted to LPG if it is assessed as safe by the Taxi Examiners and is accompanied by an approval certificate obtained from DVSA.
- 4.24 A number of enquiries have been made by the trade about retro fitting of vehicles with EV capability, although no firm proposals or applications have been made or vehicle specifications submitted to the Council. In the interim it is proposed that any request to retrofit or for conversion of an existing taxi or PHC vehicle is dealt with on a case by case basis. Provided that the following can be shown by the operator and that any modification is carried out at the owner's risk, conversion may be considered appropriate:
- 4.24.1 it is assessed as safe by the Taxi Examiners; and
- 4.24.2 it is accompanied by an approval certificate obtained from DVSA
- 4.25 A number of enquiries have also been made by the trade about replacement engines, which could potentially change the emissions rating of an existing vehicle. Upgrading a vehicle's engine does not automatically mean that there is an improvement to the emissions level, and a number of other components would also require to be upgraded.
- 4.26 In more general sense, just because a vehicle has been converted does not mean that its Euro rating will change. DVSA advises that there is no mechanism to reclassify a vehicle's Euro rating. Once a vehicle has been given a classification it will always have this, and the V5 vehicle registration document cannot be changed

in that respect. The Euro rating remains with the vehicle for its lifetime. DVSA can re-categorise the vehicle's emissions level, and an application can be made to the Driver and Vehicle Licensing Agency (DVLA) that allows the tax bracket to be changed. This would in essence dictate that the vehicle has a different emission rating, which would then form part of any future MoT process. However, the vehicle would still retain its original Euro rating.

- 4.27 The Scheme of Delegation does not allow Council officers to approve vehicle conversions, and all application to convert existing vehicles will be referred to the committee for consideration.

After market devices

- 4.28 There are a number of after market devices and fuel additives that manufacturers claim can improve fuel economy and/or reduce exhaust emissions.
- 4.29 The majority of after market devices require ongoing maintenance and do not provide a permanent or fixed effect on emissions. It is not proposed to allow the inclusion of after market devices within the age and emissions policy, and any application submitted would be dealt with on a case by case basis.
- 4.30 Proposed changes to conditions and policy are shown in Appendix 4.

5. Next Steps

- 5.1 Council officers will monitor the implementation of the proposed changes and provide a further update in 12 months

6. Financial impact

- 6.1 Overall the change to conditions will not create any additional costs to the Council budget. The mitigation measures previously agreed (allowing any operator who applies to change their vehicle without paying the normal change of vehicle variation fee) are estimated at £60,000 over four years. This will be contained within the licensing budget
- 6.2 The Council's scale of fees for licensing applications was approved with effect from 1 April 2019. Any costs implementing policy changes will be contained within the current ring-fenced income generated from licence application fees.

7. Stakeholder/Community Impact

- 7.1 The development of policy in respect of the licensing of taxis and private hire cars is part of the wider policy-making role for the Council. It is essential that all strategic aims of the Council are considered, and that where appropriate the taxi and private hire car licensing policy is consistent with these aims

- 7.2 Air Quality Management Areas have been declared at five areas across the city where air quality assessment has identified that UK air quality objectives (AQO) are not being met.
- 7.3 This policy will reduce the carbon footprint of the taxi and private hire car trade within the city and contribute to the Council's Sustainable Energy Action Plan to reduce carbon emissions across the city by 42% by 2020
- 7.4 The contents and recommendations neither contribute to, nor detract from, the delivery of the three Public Sector Equality Duties.
- 7.5 The contents and recommendations described in this report do not deliver any outcomes relating to the ten areas of rights, nor do they enhance or infringe them.
- 7.6 Representatives from the taxi and private hire car trade were consulted on at meetings of the Hire Car Consultation Group on 4 October 2016, 1 March 2017, 30 November 2017, 2 February 2018, April 2018, October 2018 and 5 March 2019
- 7.7 Council officers continue to discuss implementation with the trade during regular meetings.

8. Background reading/external references

- 8.1 None

9. Appendices

- 9.1 Appendix 1 – Taxi and Private Hire Cars Age Limitation and Emission Standards (new policy agreed by the Regulatory Committee on 16 March 2018)
- 9.2 Appendix 2 - Licensing Conditions
- 9.3 Appendix 3 – Hybrid Vehicles
- 9.4 Appendix 4 – Proposed changes to taxi and private hire car conditions and policy.

Taxi and Private Hire Cars Age Limitation and Emission Standards policy agreed by the regulatory committee on 16 March 2018.

Taxi or PHC licensed by the City of Edinburgh Council

Age Limit

1. **Effective 1 April 2020** there will be an Age Limit applied to Taxis and Private Hire Cars (PHC) licensed by the City of Edinburgh Council, Subject to meeting normal conditions about roadworthiness, a taxi and PHC can be submitted for test prior to the 10th anniversary of its registration for renewal of licence and can continue to operate until the expiry of that licence period.
2. **Effective 1 April 2020** Any Taxi or PHC which is converted to LPG will be an exception to the above age limit and allowed an additional 4 years of operation. Subject to meeting normal conditions about roadworthiness a converted vehicle can be submitted for test prior to the 14th anniversary of its registration for renewal of licence and can continue to operate until the expiry of that licence period.

In addition to vehicles requiring to meet the above age limits, the emission standards set out below will also apply with the relevant date for both age limitation and emission standards being the earliest date applicable in either category.

Emission Standards

3. **Effective 1 April 2019** no Taxi or PHC will thereafter be accepted for test unless it is Euro 5 or above. Any Euro 0-4 Taxi or PHC which has passed its test and is licensed prior to 1 April 2019 may continue to be operated until its licence expires or **31 Mar 2020** whichever date is earliest.
4. **Effective 1 April 2022** no Taxi or PHC will thereafter be accepted for test unless it is Euro 6 or above. Separately to this requirement, any Euro 5 Taxi or PHC that has passed its test and is licensed prior to 1 April 2022 may continue to be operated until its licence expires or **31 Mar 2023** whichever date is earliest.

Taxi or PHC not currently licensed by the City of Edinburgh Council

5. **Effective 7 May 2018**, no vehicle will be accepted for licensing as a Taxi or PHC or as a replacement vehicle for an existing Taxi or PHC licence unless it is either Euro 5 or 6.
6. **Thereafter effective 1 October 2018** no Taxi or PHC will be accepted for licensing as a Taxi or PHC or as a replacement vehicle for an existing Taxi or PHC licence unless it is a Euro 6.

Any applicant for either the grant or renewal of a taxi or PHC licence may request that a standard condition be disapplied in relation to his/her licence. Where an applicant

seeks an exemption from the standard conditions in relation to either the age limitation or emission standards then such applications will be referred to Committee for determination on a case by case basis and it will be for individual applicants to set out their position as to why the conditions should not be applied. In any such case, were an applicant's requests for exemption to be refused then the applicant will be entitled to appeal the Committee's decision to the Sheriff.

Licensing Conditions

Current Taxi Condition 256:-

Licensed Vehicles in Edinburgh must be a motor vehicle of a type or model which holds a valid European Whole Vehicle Type Approval as an M1 vehicle, is purpose built for use as a Licensed Vehicle and must comply in all respects with the requirements of any Acts and Regulations relating to motor vehicles.

In addition to the above:-

From **7 May 2018** any motor vehicle to be licensed in respect of a new taxi licence or replacement vehicle under an existing taxi licence will require to be a Euro 5 or 6 taxi vehicle

From **1 October 2018** any motor vehicle to be licensed in respect of a new taxi licence or a replacement vehicle under an existing taxi licence will require to be Euro 6 taxi vehicle.

From **1 April 2019** any motor vehicle to be submitted for test in respect of either a new or existing taxi licence will require to be (or exceed) a Euro 5 taxi vehicle. Any Euro 0-4 taxi vehicle licensed as a taxi prior to 1 April 2019 may continue to operate until that licence expires or 31 March 2020 whichever date is earliest

From **1 April 2020** all Licensed Vehicles must be less than 11 years old from the date of first registration (other than a Licensed Vehicle which has been converted to LPG). A Licensed Vehicle submitted for test in respect of renewal of a taxi licence prior to the 10th anniversary of its registration may continue to operate as a taxi until the expiry of the licence period following upon renewal of such licence. A Licensed Vehicle which has been converted to LPG submitted for test in respect of renewal of a taxi licence prior to the 14th anniversary of its registration may continue to operate as a taxi until the expiry of the licence period following upon renewal of such licence:

From **1 April 2022** any motor vehicle to be submitted for test in respect of either a new or existing taxi licence will require to be (or exceed) a Euro 6 taxi vehicle. Any Euro 5 taxi vehicle licensed as a taxi prior to 1 April 2022 may continue to operate until that licence expires or 31 March 2023 whichever date is earliest

Current PHC Conditions 303:-

Licensed Vehicles in Edinburgh must be a motor vehicle of a type or model which holds a valid European Whole Vehicle Type Approval and must comply in all respects with the requirements of any Acts and Regulations relating to motor vehicles.

In addition to the above:-

From **7 May 2018** any motor vehicle to be licensed in respect of a new PHC licence or replacement vehicle under an existing PHC licence will require to be a Euro 5 or 6 vehicle

From **1 October 2018** any motor vehicle to be licensed in respect of a new PHC licence or a replacement vehicle under an existing PHC licence will require to be a Euro 6 vehicle.

From **1 April 2019** any motor vehicle to be submitted for test in respect of either a new or existing PHC licence will require to be (or exceed) a Euro 5 vehicle. Any Euro 0-4 vehicle licensed as a PHC prior to 1 April 2019 may continue to operate until that licence expires or 31 March 2020 whichever date is earliest

From **1 April 2020** all Licensed Vehicles, other than a Licensed Vehicle which has been converted to LPG, must be less than 11 years old from the date of first registration. A Licensed Vehicle submitted for test in respect of renewal of a PHC licence prior to the 10th anniversary of its registration may continue to operate as a PHC until the expiry of the licence period following upon renewal of such licence. A Licensed Vehicle which has been converted to LPG and submitted for test in respect of renewal of a PHC licence prior to the 14th anniversary of its registration may continue to operate as a PHC until the expiry of the licence period following upon renewal of such licence

From **1 April 2022** any motor vehicle to be submitted for test in respect of either a new or existing PHC licence will require to be (or exceed) a Euro 6 vehicle. Any Euro 5 vehicle licensed as a PHC prior to 1 April 2022 may continue to operate until that licence expires or 31 March 2023 whichever date is earliest

HYBRID CARS

Hybrid cars, have electric elements to their powertrains but cannot be considered 'electric cars' due to the presence of a petrol engine.

The term 'hybrid' is technically quite vague, but in the context of cars almost always refers to a petrol-electric powertrain. This means the car uses a combination of electricity stored in batteries and petrol stored in a tank to propel the car forward. The details of this arrangement will vary from car to car.

A hybrid vehicle will almost always be able to charge its own batteries using the petrol engine. In some cases, this is all the petrol engine is there for – to recharge the batteries, which power the electric motors. In other types of hybrid, the petrol motor drives the wheels directly, but an additional battery/motor combination adds some electric drive.

The main advantages of a hybrid are that it should consume less fuel and emit less CO₂ than a comparable conventional petrol or diesel-engined vehicle.

Hybrid car owners also get extra benefits in the shape of lower [first year road tax](#) and [company car tax](#).

Hybrid cars have a conventional engine, an electric motor and a battery. There are a number of different types of hybrids and each works in a different way.

Parallel hybrid cars

These are the most common type of hybrid, and the [Toyota Prius](#) is the most widely known example. The car's wheels can be powered in three different ways: either directly by the engine, by the electric motor alone, or by both power sources working together.

When pulling away, and at speeds up to 15mph, the Prius only uses the electric motor for power, making it very economical for stop-start city driving. The petrol engine cuts in as speed increases, and it is used most during hard acceleration.

Whenever you decelerate or use the brakes, the regenerative braking system produces electricity and stores it in the battery for use later on. The battery is big enough that the electric motor can power the car for up to 1.25 miles.

Toyota also uses this system in the [Yaris](#) and [Auris](#) hatchbacks and [Prius+](#) MPV hybrids, while cars from [Audi](#), [BMW](#), [Citroen](#), [Land Rover](#), [Lexus](#), [Mercedes-Benz](#), [Peugeot](#), [Porsche](#) and [Volkswagen](#) work on the same basis.

Range extender hybrid cars

These only use their conventional engine to produce electricity for a generator that recharges the batteries. The engine never drives the car, it only produces energy for the electric motor.

The [BMW i3](#) with Range Extender is one of the most popular examples. The [Honda Jazz Hybrid](#) also uses an electric motor to help their relatively small conventional engines when required.

Hybrids are also categorised as either strong or mild depending on the amount of battery power they have. With more battery capacity, strong hybrids can drive further than mild ones on electric power only.

The Suzuki Ignis is a mild hybrid, and one of the cheapest hybrid cars available

In 'mild hybrids', the amount of electric power that drives the wheels is limited. The car won't normally drive on electric power alone, but a small electric motor can be used to fill in the gaps. These systems are cheaper than 'full hybrid' models but have a much smaller benefit in terms of emissions.

Plug-in hybrids

As the name implies, this type of hybrid can be plugged into an electric outlet to recharge their batteries, as well as being charged on the move.

Effectively, they are a halfway house between conventional hybrids and full electric vehicles. Although they have a conventional engine, they also have larger batteries than regular hybrids and can drive longer distances on electric power alone - up to 30 miles in some cases. When used correctly; there is no requirement to plug the car in (unlike with electric cars) and many owners choose not to. There are a growing number of plug-in hybrids on offer, including the [Mistubishi Outlander](#), [Toyota Prius](#) and [Volvo V60](#).

Electric car, or 'EV'?

An electric car is one that runs on, and is 'charged up' with, electric power. Petrol or diesel is never used to refuel an electric car. The electricity that powers an electric car is stored in batteries before being used by electric motors to drive the car's wheels; the addition of a fossil fuel engine would make it a hybrid.

Electric cars are becoming commonplace thanks to certain financial advantages, including government grants and the lower cost of "filling up" compared to a tank of petrol. They're considered better for the environment due to the fact they emit no exhaust gases. Popular examples of electric vehicles (often abbreviated to "EV") include the Nissan Leaf, [Renault Zoe](#), and [Tesla Model S](#) but the choice is expanding rapidly.

Electric vehicles have several key benefits when compared to ordinary petrol and diesel cars, as well as increasingly popular hybrid cars. Electric vehicles emit no pollution at the tailpipe, which means they have a much smaller local environmental impact. They operate very quietly and are generally extremely easy to drive, with no real gearbox to speak of and a great deal of power at low speeds. You can drive an electric car on an automatic-only driving licence.

Most importantly they can be charged up at home. You can in certain circumstances 'refuel' an electric car using an ordinary three-prong plug wherever you find a socket, which is pretty much everywhere. While many owners choose to install a slightly more sophisticated 'plug' at home for faster charging, it's perfectly possible to use the existing setup on your drive or in your garage. Faster chargers, such as those found in car parks and at petrol stations, are also useful for EV owners.

LECV Taxi

TX is a range-extended electric vehicle. This means that it is always driven electrically by a motor and powered by a battery. The electric range of 81 miles, combined with flexible plug-in charging options, gives most taxi drivers the ability to complete their day on electric power.

Because the nature of a taxi driver's work is varied and unpredictable by its nature, TX also has a small petrol range-extender fitted. This is not connected to the wheels and cannot drive the cab as an engine, it acts as a generator to send electrical energy to the battery and ensures drivers are able to complete their fare before needing to stop to recharge. It is this technology which overcomes the range anxiety faced by many operators and gives the confidence to consider an ultra-low emissions cab.

As well as emitting none of the harmful particulates associated with a diesel engine, TX combined CO₂ emissions on the official WLTP drive cycle, which includes use of the range-extender, is only 20 g/km. This compares to between 212 and 244 g/km for a diesel London Taxi (depending on model / age) and represents a huge step towards improving the air quality in our cities.

Hydrogen fuel cell car?

At the moment, petrol, diesel and electricity are the only practical ways of transferring energy to a car for most people. The millions of plug sockets and thousands of fuel stations make it relatively easy to refuel a hybrid, EV or pure Internal combustion engine (ICE) car in Britain, even if there are downsides to both. However, for the more adventurous (and geographically serendipitous) there is another way – hydrogen.

A hydrogen fuel cell car is refuelled with compressed hydrogen. The car itself then turns the hydrogen into electricity, which it uses to drive its wheels. The emission from this process is pure water, which is clean enough to drink.

The technology is still in its infancy, but there are some clear advantages over fossil fuels, as well as a number of benefits in comparison to plug-in electric vehicles. Hydrogen is generated via a process called electrolysis, which can be done on a small scale in-situ; theoretically, an individual pump or station can create its own hydrogen using on-site renewables or excess electricity from the grid. It can also be pumped into a car quickly, closely resembling the process of refuelling a petrol car.

At the moment, there are only a handful of [hydrogen pumps in the UK](#). Some even exist at motorway service stations now but it is expected that this coverage will expand significantly over the next couple of years. It's too early to recommend this technology to most buyers but hydrogen fuel cell mobility already has enormous potential for small fleets.

Whatever happens, it's important to remember that technology develops rapidly, and that there's more to mobility than petrol pumps and charging cables.

What are the benefits of a hybrid car?

Driving a hybrid is similar to driving a conventional automatic car, so there's little compromise on performance.

Most strong hybrids will have a choice of power modes, too, ranging from eco to power, enabling the driver to choose maximum efficiency or performance depending on the driving conditions.

Range anxiety shouldn't be an issue and you because hybrids charge up their own batteries and don't necessarily need a charging point.

Although the tax benefits of hybrid ownership aren't as big as they used to be, company car drivers still pay less Benefit-In-Kind (BIK) tax than drivers of petrol or diesel cars, and cars emitting less than 75g/km qualify for London congestion charge exemption.

Hybrid Pros

- **Cleaner energy.** Because hybrids run on a combination of petrol and electricity, they emit less pollution than petrol or diesel only vehicles.
- **Regenerative braking.** Much of the energy produced during braking is captured and fed to the battery. This action increases the charge available to the electric motor, which results in less fuel consumption. It can also extend the life of brakes.
- **Weight savings.** Many hybrids are constructed using lightweight materials, so they don't consume as much energy as their full-weight counterparts.
- **Smaller engines.** Because they don't have to power the car alone, the petrol engines used in hybrid cars are usually small, light, and highly efficient.
- **Higher resale value.** Hybrid versions of popular vehicles remain in high demand on the used car market. With a hybrid, you will likely recoup a higher percentage of the original investment at point of re-sale.

Hybrid Cons

- **Performance.** Most hybrids are built for economy, not speed. Total output and acceleration lag behind comparable gas-only vehicles. To conserve weight, hybrids usually aren't equipped with sport-tuned suspensions and other performance enhancements found on non-hybrid models. The location of the battery pack often results in less-than-ideal weight distribution, which can affect handling.
- **Price.** Although the gap is narrowing, hybrids remain more expensive, sometimes by a significant margin. Many buyers find this trade-off to be unacceptable.
- **Maintenance:** Hybrid vehicles generally cost more to repair, and not all mechanics have the equipment and know-how to fix them properly.

Proposed Taxi and Private Hire Cars Age Limitation and Emission Standards new policy.

Taxi or PHC licensed by the City of Edinburgh Council

Age Limit

1. **Effective 1 April 2020** there will be an Age Limit applied to Taxis and Private Hire Cars (PHC) licensed by the City of Edinburgh Council, Subject to meeting normal conditions about roadworthiness, a taxi and PHC can be submitted for test prior to the 10th anniversary of its registration for renewal of licence and can continue to operate until the expiry of that licence period.
2. **Effective 1 April 2020** Any Taxi or PHC which is converted to LPG will be an exception to the above age limit and allowed an additional 4 years of operation. Subject to meeting normal conditions about roadworthiness and 6 monthly compliance test from the vehicles 10th anniversary this will allow a vehicle to be submitted for test prior to the 14th anniversary of its registration for renewal of licence and can continue to operate until the expiry of that licence period
3. **Effective 1 April 2020** to allow any Electric Taxi or PHC, which is not a hybrid vehicle, to be an exception to the 10 year age limit and allow an additional 4 years of operation. Subject to meeting normal conditions about roadworthiness and 6 monthly compliance test from the vehicles 10th anniversary this will allow a vehicle to be submitted for test prior to the 14th anniversary of its registration for renewal of licence and can continue to operate until the expiry of that licence period

In addition to vehicles requiring to meet the above age limits, the emission standards set out below will also apply with the relevant date for both age limitation and emission standards being the earliest date applicable in either category.

Emission Standards

4. **Effective 1 April 2019** no Taxi or PHC will thereafter be accepted for test unless it is Euro 5 or above. Any Euro 0-4 Taxi or PHC which has passed its test and is licensed prior to 1 April 2019 may continue to be operated until its licence expires or **31 Mar 2020** whichever date is earliest.
5. **Effective 1 April 2022** no Taxi or PHC will thereafter be accepted for test unless it is Euro 6 or above. Separately to this requirement, any Euro 5 Taxi or PHC that has passed its test and is licensed prior to 1 April 2022 may continue to be operated until its licence expires or **31 Mar 2023** whichever date is earliest.

Taxi or PHC not currently licensed by the City of Edinburgh Council

6. **Effective 7 May 2018**, no vehicle will be accepted for licensing as a Taxi or PHC or as a replacement vehicle for an existing Taxi or PHC licence unless it is either Euro 5 or 6.
7. **Thereafter effective 1 April 2020** no Taxi or PHC will be accepted for licensing as a Taxi or PHC or as a replacement vehicle for an existing Taxi or PHC licence unless it is a Euro 6.

Electric Vehicles

8. Any Electric Taxi or PHC, which is not a hybrid vehicle, to be an exception to the 10 year age limit and allow an additional 4 years of operation. Subject to meeting normal conditions about roadworthiness and 6 monthly compliance test from the vehicles 10th anniversary this will allow a vehicle to be submitted for test prior to the 14th anniversary of its registration for renewal of licence and can continue to operate until the expiry of that licence period.

Hybrid Vehicles

9. Hybrid cars, have electric elements to their powertrains but cannot be considered 'electric cars' due to the presence of a petrol engine. The term 'hybrid' is technically quite vague, but in the context of cars almost always refers to a petrol-electric powertrain. This means the car uses a combination of electricity stored in batteries and petrol stored in a tank to propel the car forward.
10. Hybrid cars at time of manufacture / registration all have a Euro rating which reflects the vehicles emissions level.

LPG Vehicles

11. Prior to 2018 licensing conditions prevented the use of LPG vehicles and they had never previously been considered appropriate for licensing. All application to convert existing will be referred to committee for consideration.
12. Any existing vehicle licenced by CEC can be converted to LPG provided that the following can be shown by the operator and that any modification is carried out at the owner's risk:
 - a. It is assessed as safe by the Taxi Examiners;
 - b. it is accompanied by an approval certificate obtained from DVSA; and
 - c. after such conversion subject to meeting normal conditions about roadworthiness and 6 monthly compliance test from the vehicles 10th anniversary this will allow a vehicle to be submitted for test prior to the 14th anniversary of its registration for renewal of licence and can continue to operate until the expiry of that licence period.

Retro Fit / Replacement engines

13. any existing vehicle licenced by CEC can be adapted to Euro 6 provided that the following can be shown by the operator and that any modification is carried out at the owner's risk:
 - a. It is assessed as safe by the Taxi Examiners;
 - b. it is accompanied by an approval certificate obtained from DVSA.
14. In more general term just because a vehicle has been converted does not mean that its Euro 6 will change. DVSA advise that there is no mechanism to reclassify a

vehicles Euro once a vehicle is given a euro classification it will always have this and the V5 vehicle registration document cannot be changed in that regard. The Euro rating once issued remains with the vehicle for life.

15. All application to convert existing will be referred to committee for consideration.

After market devices

16. There are a number of aftermarket devices and fuel additives that manufacturers claim can improve fuel economy and/or reduce exhaust emissions. The majority if not all aftermarket devices require ongoing maintenance and do not provide a permanent or fixed solution to emissions accordingly they have not been included within the policy and any application submitted would be dealt with on a case by case basis.

Any applicant for either the grant or renewal of a taxi or PHC licence may request that a standard condition be disapplied in relation to his/her licence. Where an applicant seeks an exemption from the standard conditions in relation to either the age limitation or emission standards then such applications will be referred to Committee for determination on a case by case basis and it will be for individual applicants to set out their position as to why the conditions should not be applied. In any such case, were an applicant's requests for exemption to be refused then the applicant will be entitled to appeal the Committee's decision to the Sheriff.

Retirement policy

17. Owners seeking an exemption to policy on the basis of retirement can be dealt with by council officer under delegated authority and given an exemption of up to a maximum period of 1 years dependant on circumstance.

a. Owners would have to provide a written declaration that it was their intention to retire and the intended date of retirement.

b. Only one exemption can be dealt with under delegated authority

18. It is acknowledged that circumstance can change and any change to retirement plans would be referred back to committee for further consideration. In addition any evidence of bad faith would also be referred back to committee with an immediate request to vary terms of the licence and it may also be considered in context of an owner's suitability in terms of the fit and proper test.

Licensing Conditions

Condition 256 :-

Licensed Vehicles in Edinburgh must be a motor vehicle of a type or model which holds a valid European Whole Vehicle Type Approval as an M1 vehicle, is purpose built for use as a Licensed Vehicle and must comply in all respects with the requirements of any Acts and Regulations relating to motor vehicles.

In addition to the above:-

From **7 May 2018** any motor vehicle to be licensed in respect of a new taxi licence or replacement vehicle under an existing taxi licence will require to be a Euro 5 or 6 taxi vehicle

From **1 April 2020** any motor vehicle to be licensed in respect of a new taxi licence or a replacement vehicle under an existing taxi licence will require to be Euro 6 taxi vehicle.

From **1 April 2019** any motor vehicle to be submitted for test in respect of either a new or existing taxi licence will require to be (or exceed) a Euro 5 taxi vehicle. Any Euro 0-4 taxi vehicle licensed as a taxi prior to 1 April 2019 may continue to operate until that licence expires or 31 March 2020 whichever date is earliest

From **1 April 2020** all Licensed Vehicles must be less than 11 years old from the date of first registration (other than a Licensed Vehicle which is an Electric Vehicle or has been converted to LPG). A Licensed Vehicle submitted for test in respect of renewal of a taxi licence prior to the 10th anniversary of its registration may continue to operate as a taxi until the expiry of the licence period following upon renewal of such licence. A Licensed Vehicle which has been converted to LPG submitted for test in respect of renewal of a taxi licence prior to the 14th anniversary of its registration may continue to operate as a taxi until the expiry of the licence period following upon renewal of such licence:

From **1 April 2022** any motor vehicle to be submitted for test in respect of either a new or existing taxi licence will require to be (or exceed) a Euro 6 taxi vehicle. Any Euro 5 taxi vehicle licensed as a taxi prior to 1 April 2022 may continue to operate until that licence expires or 31 March 2023 whichever date is earliest

Current PHC Conditions

Condition 303:-

Licensed Vehicles in Edinburgh must be a motor vehicle of a type or model which holds a valid European Whole Vehicle Type Approval and must comply in all respects with the requirements of any Acts and Regulations relating to motor vehicles.

In addition to the above:-

From **7 May 2018** any motor vehicle to be licensed in respect of a new PHC licence or replacement vehicle under an existing PHC licence will require to be a Euro 5 or 6 vehicle

From **1 April 2020** any motor vehicle to be licensed in respect of a new PHC licence or a replacement vehicle under an existing PHC licence will require to be a Euro 6 vehicle.

From **1 April 2019** any motor vehicle to be submitted for test in respect of either a new or existing PHC licence will require to be (or exceed) a Euro 5 vehicle. Any Euro 0-4 vehicle licensed as a PHC prior to 1 April 2019 may continue to operate until that licence expires or 31 March 2020 whichever date is earliest

From **1 April 2020** all Licensed Vehicles, other than a Licensed Vehicle which is an Electric Vehicle or has been converted to LPG, must be less than 11 years old from the date of first registration. A Licensed Vehicle submitted for test in respect of renewal of a PHC licence prior to the 10th anniversary of its registration may continue to operate as a PHC until the expiry of the licence period following upon renewal of such licence. A Licensed Vehicle which has been converted to LPG and submitted for test in respect of renewal of a PHC licence prior to the 14th anniversary of its registration may continue to operate as a PHC until the expiry of the licence period following upon renewal of such licence

From **1 April 2022** any motor vehicle to be submitted for test in respect of either a new or existing PHC licence will require to be (or exceed) a Euro 6 vehicle. Any Euro 5 vehicle licensed as a PHC prior to 1 April 2022 may continue to operate until that licence expires or 31 March 2023 whichever date is earliest