Sandwell
Metropolitan Borough Council

Report to Cabinet

1 September 2021

Subject:	Black Country Ultra Low Emission Vehicle Strategy
Cabinet Member:	Cllr Millard, Cabinet Member for Connected and Accessible Sandwell
Director:	Tammy Stokes, Interim Director Regeneration and Growth
Key Decision:	Yes
Contact Officer:	Transportation Planning Officer, Oliver Ford, oliver_ford@sandwell.gov.uk

1 Recommendations

1.1 That approval be given to the Black Country Ultra Low Emission Vehicle (ULEV) Strategy and Implementation Plan as set out in Appendix A.

2 Reasons for Recommendations

2.1 The UK government has committed to banning the sale of petrol and diesel cars by 2030. The resultant societal shift from petrol and diesel, internal combustion engine (ICE) vehicles to ULEVs will require widespread support from local authorities. It is projected that there will be an additional 42,500 ULEVs within the Black Country by 2025. The Black Country ULEV strategy sets out a framework for how Sandwell Metropolitan Borough Council (SMBC) can support this transition. Failure to support the transition would result in the borough and Black Country being left behind.

2.2 Adoption of the strategy would support reductions in air pollution. The whole of Sandwell has been a designated Air Quality Management Area (AQMA) since 2005, because of lower than average air quality across the borough. This low air quality has resulted in increased prevalence of heart and lung disease. Adoption of the strategy would support a transition away from (ICE) vehicles (the prime contributors to poor air quality) to cleaner electric ULEVs. It is forecast that a transition based on a 2030 ICE ban would, by 2025, result in a 12% reduction of transport Nitrous Dioxide (NOx) emissions and a 36.6% reduction in transport Particulate Matter (PM) emissions across the borough. By 2040 these reductions are forecast to be 83.4% and 90.1% respectively.

2.3 Adoption of the strategy would support emissions reduction. Following the UK Government's legislative commitment to the country reaching net-zero Carbon Dioxide (CO2) emissions by 2050, the West Midlands Combined Authority (WMCA) has committed to the metropolitan area reaching net zero by 2041, a target which has been matched by SMBC for the borough. Transport is the biggest contributor to CO2 emissions nationally, regionally and locally (it is estimated that transport accounts for 38% of all emissions within Sandwell). It is forecast that a transition to ULEVs based on a 2030 ICE ban would result in a 4% decrease in transport CO2 emissions by 2025. This transition and resultant decrease in transport CO2 emissions would contribute to Sandwell meetings its own, regional and national emission reduction targets.

2.4. Adoption of the strategy will enable the council to use the document as a central plank for ULEV charging infrastructure bids such as the On-Street Residential Charging Scheme.

3 How does this deliver objectives of the Corporate Plan?

	People live well and age well - Transitioning to ULEVs from ICE vehicles will dramatically improve air quality throughout the borough, lessening residents' exposure to air pollution and consequent lung and cardiovascular conditions. It is forecast that within Sandwell, a 2030 ban on the sale of ICE vehicles, supported by the Black Country ULEV strategy, would reduce NOx emissions by 12% over the next five years and 83.4% over the next fifteen years. Similarly, it is forecast that PM emissions would be reduced by 37% by 2025 and 90.1% by 2040.

	A connected and accessible Sandwell - The UK government has announced that the sale of all new ICE cars will be banned from 2030. Whilst modal shift away from private car use in an urban context continues to be the primary goal of local, regional and national policy, the private car remains central in providing mobility for Sandwell residents. A supported transition away from ICE cars to ULEVs, ensures that Sandwell residents will continue to have access to a range of modes, including the private car.

4 Context and Key Issues

4.1 Background:

In February 2020, Black Country Local Authorities partnered to commission Cenex to develop an evidenced ULEV Strategy, Vision and Implementation Plan, to aid in the acceleration of ULEV uptake. the objectives of the study were to:

- Build upon the existing Transport for West Midlands ULEV Strategy Report.
- Baseline the current Black Country situation;
- Develop and analyse scenarios projecting the number of ULEVs, infrastructure, energy demand and grid capacity constraints;
- Calculate the benefits associated with these scenarios;
- Create and agree a five-year ULEV vision; and
- Outline an implementation plan to deliver the vision.

The overarching vision statement is “The Black Country will lead the West Midlands on the road to net-zero by accelerating and amplifying the EV transition in anticipation of a 2035 ban on the sale of conventional vehicles”. The strategy, was approved by a leaders’ meeting of The Association of Black Country Authorities (ABCA) in February 2021.

4.2 Strategic Context:

Following the 2015 Paris agreement, in October 2017 the UK Government published the Clean Growth Strategy setting out an overarching ambition for all industrial growth in the UK to be clean, as well as reduced the nation’s reliance on fossil fuels. In July 2018, the UK Government published the Road to Zero Strategy, which states that no new conventional petrol or diesel engines will be sold from 2040 onwards. In June 2019, the 2008 Climate Change Act was amended to

legally bind the UK to bring all greenhouse gas emissions to ‘net zero’ by 2050.

In July 2019, the West Midlands Combined Authority (WMCA) committed to setting a ‘net zero’ emissions target by 2041, with a climate action plan being approved by the WMCA board iny January 2020. The WMCA Board further approved a regional ULEV strategy, in February 2020. The Black Country ULEV strategy sits under this regional document. Whilst the WMCA ULEV Strategy focusses on sharing best practice, co-ordination and possible joint delivery of a large-scale network of rapid charging ‘hubs’, the Black Country ULEV strategy takes a more granular approach, focussing on the specifics of each authority and offering a framework for the delivery of infrastructure on the ground.

4.3 **Key Findings:**

As shown in Table 1, Sandwell, The Black Country and the West Midlands all lag behind the rest of the country when it comes to adoption of ULEVs. This is reflected in the availability of charging infrastructure across the Black Country, with around 80% of the sub-region further than one km from the nearest publicly available charge point. However, relative to median wage, all four Black Country authorities sit on or above the trend for ULEV adoption, indicating higher uptake than might be expected given the average wage across each of the four authorities.

Table 1. National, regional and local ULEV Adoption Rates

	Percent of cars which are ULEV
UK	0.47%
West Midlands	0.35%
Sandwell	0.20%
Dudley	0.23%
Wolverhampton	0.19%
Walsall	0.17%

The Black Country ULEV Strategy outlines the key consequences of a 2030 ban on the sale of ICE cars. These are summarised in the table below.

Table 2. Outcomes of a 2030 Ban on the Sale of ICE Cars

	Sandwell 2025	Black Country 2025	Sandwell 2040	Black Country 2040
Proportion of ULEVs (as approx. percentage of entire private vehicle fleet)	Note: This data has not been forecast at an individual borough level.	10%	Note: This data has not been forecast at an individual borough level	80%
Required increase in Public ULEV Charging Infrastructure (number of sockets)	7kW (Standard): 175 22kW (Fast): 49 50 kW (Rapid): 6 150kW (Ultra Rapid): 1	7kW (Standard): 761 22kW (Fast): 214 50 kW (Rapid): 15 150kW (Ultra Rapid): 14	Note: This has not been forecast as the longer term outlook is too uncertain to make a reasonable forecast.	Note: This has not been forecast as the longer term outlook is too uncertain to make a reasonable forecast.
Reduction in Carbon emissions	3.8%	3.8%	68.4%	67.8%
Air Pollution – Reduction in Nitrogen Dioxide Emissions	12.0%	12.8%	83.4%	84.0%
Air Pollution – Reduction in Particulate Emissions	36.6%	36.8%	90.1%	90.4%

Note: CO2, NOx and PM figures given as reduction vs. 2019 baseline

4.4 Key Recommendations:

To meet the demand and achieve the benefits outlined above, the Black Country ULEV strategy makes several key recommendations as priorities for action by local authorities and Black Country Transport. These are outlined below:

- Installation of an additional 761 standard (7kW) and 229 fast (22-50kW) charging sockets across the Black Country by 2025;
- Use planning policy to deploy charge points at retail and business car parks;
- Procure ULEVs only for all new council cars and vans;
- Require most taxi and private hire vehicles to switch to ULEV;

- Equip all council offices, depots, car parks and sports facilities with charge points;
- Deploy measures to slow the growth of private car ownership in Sandwell
- Establish a programme to inform and encourage the public and businesses
- Coordinate with TfWM to support installation of additional rapid and ultra-rapid chargers;
- Publish a local public transport decarbonisation action plan.
- Make EVs a scored variable within road passenger transport contract tenders, so that all newly licenced Taxi/Private Hire vehicles are ULEVs within five years;
- Engage with local training providers to ensure that the local labour market is equipped to install and maintain any eventual Black Country charge point network;
- Commission a wider study to examine the ways in which journeys and the private vehicle fleet can be managed by the Black Country Authorities;
- Appoint one full time or full time equivalent officer of a management level to manage the procurement and operation of EV charging infrastructure across the Black Country.

4.5 **Consultation:**

Following the strategy's completion and approval in principle by ABCA, the strategy went out to public consultation. The consultation ran from Monday 10th August 2020 to Friday 9th October 2020. Due to COVID-19 restrictions, the consultation was carried out online, with a readout service being available to any respondents who were not able to access the consultation themselves.

The consultation was primarily promoted via the council's social media channels by the corporate communications team. Overall, the consultation received 851 responses, with 192 (23%) of these being from Sandwell residents. Key findings are outlined below:

- When asked 'do you think the Black Country ULEV Strategy does enough to support EVs across the Black Country', the results were evenly split (33% each) between 'yes', 'no' and 'don't know'.

- A clear majority (61%) of respondents stated that they were considering purchasing an electric vehicle by 2025.;
- When asked about specific policy measures to support ULEV adoption, consultees responded as follows:

Table 3. Consultee Support for ULEV policies

Measure	Appropriate	Not Ambitious Enough	Too Ambitious	Don't Know
500 Public charge points to be installed across the Black Country by 2025	**43%**	**38%**	**14%**	**4%**
All new taxi licenses to be granted to electric vehicles only by 2023	**54%**	**10%**	**29%**	**8%**
	Yes		**No**	**Don't Know**
Should it be a planning condition for developers to install chargepoints in all new residential and commercial developments	**90%**		**7%**	**3%**
Should Councils set targets for electric public transport vehicles to improve air quality in urban centres	**87%**		**9%**	**4%**

Note: Consultation was carried out before The Department for Transport announced a tighter deadline of 2030 for a ban on the sale of ICE cars, hence lower infrastructure targets outlined in table.

The respondents demonstrated a clear consensus in favour of increased ULEV up-take, and local authority action to support this. Most criticism of the strategy centred on the theme that the strategy did not go far enough. In response to this, an updated strategy was taken to ABCA Leaders meeting in February 2021, with more ambitious infrastructure targets taking into account the new 2030 ban date.

The responses demonstrated very high levels of support for increasing public charging opportunities, electrifying public sector fleets and planning requirements for the installation of charging infrastructure.

5 Alternative Options

5.1 The 2030 ban on the sale of ICE cars would remain in place at a national level regardless of the formal adoption or not of local ULEV strategies.

Not adopting the strategy at a local level would decrease local 'buy in', increasing the likelihood of Sandwell and the Black Country continuing to lag behind the rest of the UK in terms of ULEV adoption and its consequent carbon emission and air pollution reductions.

6 Implications

Resources:	There are no direct financial consequences arising from the adoption of the strategy as the strategy only makes recommendations rather than commitments. However, the strategy does recommend identifying £2.5m of capital investment up to 2025 to deliver the ULEV charging infrastructure targets outlined above. Adopting the strategy does not however commit SMBC to funding this investment itself, particularly given that there are several funding schemes and ownership models which would mitigate the direct cost to the council. Details of any capital investment in ULEV charging infrastructure, along with assessment of the proposed ownership model and associated revenue impacts would be submitted for separate consideration by cabinet. The strategy also recommends appointment of a full time (or equivalent) management level officer to manage the procurement and operation of EV charging infrastructure across the Black Country.

	Adoption of the strategy does not commit the council to funding this post. Following adoption, officers would identify ways this post could be funded, with the cost shared between the four Black Country authorities. Implementation of the strategy will require significant amounts of officer time. An indicative outline of officer time requirements is given on pg. 85 (Table 30) of the strategy. In the short to medium term it is likely that implementation of the strategy will require at least one full time equivalent from each of the four authorities, based on work on the ULEV agenda up to this point. This would be a new resource ask and work is ongoing at a Black Country level to identify potential sources for funding.
Legal and Governance:	There are no direct legal or governance implications arising from adoption of the strategy. Any legal or governance considerations arising from the procurement or operation of public charging infrastructure by the council would be submitted for separate consideration by cabinet.
Risk:	There are no direct risk implications arising from adoption of the strategy. Any risk considerations arising from the procurement or operation of public charging infrastructure by the council would be submitted for separate consideration by cabinet.
Equality:	This strategy primarily identifies measures which will support car owners in the borough. Sandwell has a lower than average car ownership level compared to the national average. 44% of the borough's households do not own a car, compared to 20% nationally[1]. Households which do not own cars are more likely to have a lower than average median income. However, the benefits associated with improvement in air quality and carbon emissions reduction will be felt by all residents. More deprived areas are more likely to suffer from air pollution and therefore benefit from a transition to ULEVs. The Black Country ULEV Strategy identifies areas which are 'most suitable' for installation of public on-street residential charging infrastructure (fig. 17, pg. 34). As part of this assessment, Cenex took into consideration several factors

[1] RAC Foundation, Car Ownership Rate in England and Wales, 2012

	including: lack of access to a driveway (most importantly), car ownership and median income. Areas with a higher than average income were more likely to be assessed as more suitable for installation of infrastructure because, given the cost ULEVs, those with higher incomes are more likely to be early adopters. To mitigate this, Sandwell officers asked Cenex to also assess areas with the median income factor being discounted. The resultant findings were not fundamentally different to the original, as the most important factor was lack of access to a driveway (in general those living without access to off street parking have lower incomes than those with driveways anyway). When identifying sites for the installation of infrastructure, officers will not solely be guided by the mapping produced by Cenex and will ensure an equitable coverage across the entire borough balancing all relevant factors when assessing locations for charging infrastructure.
Health and Wellbeing:	As stated at the start of the report, improvement in air quality is one of the primary reasons for the formation of the strategy. Adoption of the strategy would support reductions in air pollution. The whole of Sandwell has been a designated Air Quality Management Area (AQMA) since 2005, because of lower than average air quality across the borough. This low air quality has resulted in increased prevalence of heart and lung disease. Adoption of the strategy would support a transition away from ICE vehicles (the prime contributors to poor air quality) to cleaner ULEVs. It is forecast that a transition based on a 2030 ICE band would, by 2025, result in a 12% reduction of transport Nitrous Dioxide (NOx) emissions and a 36.6% reduction in transport Particulate Matter (PM) emissions across the borough. By 2040 these reductions are forecast to be 83.4% and 90.1% respectively.
Social Value	The scale of growth required in the Black Country charging network will generate additional demand for skilled labour, likely focussing on the civil and electrical engineering disciplines. These skills will be in demand to install, maintain, repair and replace EV charging infrastructure. At a national

	level, potentially millions of EV charge points will need installation and maintenance in the UK, so local recruitment will have considerable advantages in reducing the time and cost needed to provide an ongoing service that meets the needs of customers. Unlike other newly emerging industries, such as software and web development, the fundamental engineering skills required to install and maintain EV charging infrastructure have been practised by electricians for decades. The education and training infrastructure is therefore well developed and highly accessible to individuals from all backgrounds. Engaging with local training providers would maximise the local skills and employment development opportunities presented by the expansion of the EV charging infrastructure network. With a local labour market rich in electrical and civil engineering skills, the growth of the EV infrastructure network can serve to create long-term skilled labour.

7. Appendices

A – Black County ULEV Strategy.
B – Update of forecast based on 2030 ban.