

BROMSGROVE DISTRICT COUNCIL

MEETING OF THE OVERVIEW AND SCRUTINY BOARD

MONDAY 8TH JULY 2019, AT 6.00 P.M.

PARKSIDE SUITE - PARKSIDE

SUPPLEMENTARY DOCUMENTATION

The attached papers were specified as "to follow" on the Agenda previously distributed relating to the above mentioned meeting.

- 4. Bromsgrove District Council Low Emission Vehicle Strategy Pre-scrutiny (Pages 1 48)
- 6. Joint Staff Survey Task Group Update on actions arising from the Survey and recommendations from the Task Group (to follow) (Pages 49 50)
- 11. Cabinet Work Programme (Pages 51 62)

K. DICKS Chief Executive

Parkside Market Street BROMSGROVE Worcestershire B61 8DA

2nd July 2019

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BROMSGROVE DISTRICT COUNCIL

Cabinet

10th July 2019

Ultra-Low Emissions Vehicle Strategy and Funding

Relevant Portfolio Holder	Cllr M Sherrey
Portfolio Holder Consulted	Yes
Relevant Head of Service	Guy Revans/Judith Willis
Ward(s) Affected	All
Ward Councillor(s) Consulted	No
Key Decision / Non-Key Decision	Кеу

1 <u>SUMMARY OF PROPOSALS</u>

1.1 The report sets out an Ultra-Low Emissions Vehicle (ULEV) Strategy (Appendix 1) and a five year action plan in response to the rapidly growing demand for ULEV infrastructure and technology.

2 <u>RECOMMENDATIONS</u>

2.1 The Cabinet is asked to RECOMMEND to the Council that:

Strategy

i. The ULEV strategy and associated Action Plan attached at Appendix 1 is adopted.

ULEV Taxi Infrastructure funding

- i. The Head of Environmental Services and Head of Community Services have delegated power to act following consultation with the relevant Portfolio Holder, to administer the (OLEV) Ultra-Low Emission Taxi Infrastructure Scheme funding including site selection.
- ii. An increase is approved to the Capital Programme 2019/20 of £300k for the (OLEV) Ultra-Low Emission Taxi Infrastructure Scheme funding.
- iii. The Office for Low Emission Vehicles (OLEV) Ultra-Low Emission Taxi Infrastructure Scheme funding is used in procuring the installation of a dedicated electric taxi charging network which supports Bromsgrove taxi drivers and operators in:
 - a) Transitioning to electric vehicles
 - b) Their ability to travel into Birmingham's Clean Air Zone.

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ULEV funding

iv. The Head of Environmental Services and Head of Community Services have delegated power to act following consultation with the relevant Portfolio Holder, to apply for, accept, and administer (including in partnership with other local authorities) future funding in line with this strategy.

3 <u>KEY ISSUES</u>

Financial Implications

3.1 Bromsgrove District Council were successful in bidding for £300,000 in the Office for Low Emission Vehicles (OLEV) Ultra-Low Emission Taxi Infrastructure Scheme: round 2.

The grant constitutes 75% of the total capital spend with two payments delivery 50% in April 2019 and 50% in December 2019.

After preliminary discussions with other successful bidders and Charge Point Operators (CPOs) and installers, the industry is willing to fund the remaining 25% of the installation costs and add value by installation of public charge points in order and operate these for an agreed term.

The funding is based on the installation of 10 rapid charging taxi points as outlined in the original bid to be completed by March 31st 2020. Funding will only be fully delivered if the Secretary of State is satisfied that deliverables have been met. Should the OLEV funding not be spent in the manner and timescales set out, it must be returned to OLEV.

3.2 There are currently Government grants which can assist in the transition to ULEV technology, particularly the installation of electric vehicle (EV) charging points:

i. OLEV electric vehicle home charge scheme

This funding allows owners of EVs up to £500 towards the cost of a home charge point provided they have a dedicated parking space. EV owners without dedicated parking provision are unable to access this.

ii. On street residential charge point scheme

The £4.5m funding in 2019/20 is available to Local Authorities for eligible projects, on a first come, first-served basis. It allows Local Authorities access to grant funding for up to 75% of the capital costs of procuring and installing the charge point and an associated dedicated parking bay. Recent communications confirm that this funding would also be applicable for communal off-street parking facilities that are accessible by those for whom home-charging is not possible.

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iii. Workplace charging Scheme (WCS)

WCS is a voucher-based scheme designed to provide eligible applicants with support towards the upfront costs of the purchase and installation of EV charge points for staff. The contribution is limited to the 75% of purchase and installation costs, up to a maximum of £500 for each socket, up to a maximum of 20 across all sites for each applicant. The charge points cannot be publically accessible in order to be eligible for this funding.

- 3.3 Officers will include any financial implications of grant income and expenditure on the quarterly budget monitoring statements.
- 3.4 There are possible opportunities to lease land (providing suitability of conditions) to Charge Point Operators (CPOs) where they will to install, maintain and operate charge points and charge point stations (essentially a bank of charge points usually undercover as with a traditional forecourt). This may also create an opportunity for income sharing. The Land Buildings and Asset Group (LBAG), a subgroup of the Commercialisation Board) is overseeing this potential opportunity.
- 3.3 There are other aspects of the Strategy which could also link to the Council's commercialism agenda, providing more cost effective services and opportunities for revenue generation to support public services. For example, electric vehicle pool cars, investment in the low carbon economy and revenue generation from electricity grid services.

Legal Implications

- 3.4 A Local Planning Authority is the local authority or council that is empowered by law to exercise statutory town planning functions. In its role as Local Planning Authority, the Council can in certain situations required developers to include ULEV charging points as part of a proposed development.
- 3.5 The Council has the power under Section 1 of the Localism Act 2011 to act as Accountable Body under the Funding Agreement and accept the OLEV Ultra-Low Emission Taxi Infrastructure Scheme Grant. This would also apply to other OLEV funding that may be sought in the future, such as the 'On street residential charge point scheme' and the Workplace charging Scheme (WCS).

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Service / Operational Implications

3.6 The Ultra-Low Emission Vehicles (ULEV) Strategy sets out a vision and aims, along with context and rationale:

The Vision:

A local area thriving in terms of local economic growth, public health, wellbeing and the environment, enabled by a sustainable travel network and a successful low carbon sector including ULEV related industry.

The Aims:

- To support the use of ULEVs in the local area
- To support local economic activity and training opportunities in the ULEV industry
- To facilitate other actions to reduce vehicle related emissions.

The Governments 'Road to Zero' Strategy confirms the end of the sale of new conventional petrol and diesel cars and vans in the UK by 2040. The key driver in Road to Zero is improving poor air quality in order to improve public health, as road transport is one of the biggest contributors.

Neighbouring Birmingham City Council's Clean Air Zone will be in effect from January 2020.

The uptake of ULEVs in the UK presents the Council with an opportunity to work towards a sustainable future and realise significant economic, social and health benefits. However it poses challenges including the deployment of resilient re-charging and re-fuelling infrastructure.

Electric Vehicles are the most prominent and developed form of ULEV currently on the market thus the strategy action plan focuses on supporting this technology.

Planning for ULEV infrastructure, training and education and financial impact is essential to enable the District to be resilient to changing legislation and market conditions and to ensure residents, business and visitors to the local area benefit from the rapid advancement in transport towards ULEVs.

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3.7 These recommendation support the priorities, principles and strategic purposes of Bromsgrove District Council's Plan 2017- 2020 as follows:

Key Priorities:

- Financial Stability
- Economic Development
- Partnerships & Joint Ventures
- Quality Services
- Reduced Congestion

Key Principles:

- Be corporately responsible by ensuring we meet our ethical, environmental and social responsibilities, and that services support our communities to develop.
- Constantly innovate, to make the best use of our resources to ensure we deliver efficient, quality services and eliminate waste.
- Make decisions and provide challenge based on data, evidence and learning.
- Use the Council's unique position in the community to encourage and support change amongst partners and other agencies.

Strategic purposes:

- 'Help me to run a successful business'
- 'Help me to be financially independent'

Working with partners to support local business, encourage inward investment, support training that meets employer skill needs and enabling employment opportunities.

• 'Help me to live my life independently'

Working with health and other partners to reduce hospital admissions and keep people in their own home, enable access to appropriate transport, support physical activity and support access to work, education and training.

• 'Keep my place safe and looking good'

Reducing emissions and limiting the effect of climate change, including working with our communities and working with stakeholders to improve the infrastructure for cycling and walking.

• 'Provide good things for me to see, do and visit'

Envisions vibrant and flourishing town and local centres.

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3.8 Economic growth

It is important to recognise that the low carbon economy is already an area of strength, with many innovative businesses in this area. The Low Carbon and Renewable Energy sector has outperformed the growth of the wider economy, with growth in turnover nationally of 5% from 2015 to 2016. The Councils physical location and heritage in the automotive industry lends itself well towards adaptation to development of ULEV transport technology. Capitalising on this and investing in education in this industry is a key opportunity the Council can seek to facilitate.

The Worcestershire Local Enterprise (LEP)'s Energy Strategy is fully supportive of low carbon transport including a network of rapid Electric Vehicle chargers whilst increasing economic growth in the region and delivery of clean energy.

3.9 Air Quality and Climate Change

Poor air quality is the largest environmental risk to public health in the UK and there is strong evidence that global action is needed to improve on air quality and safeguard residents from the damaging effects of Climate Change. Local action is required improve conditions locally and to provide resilience for communities and industries.

National government have responded with the Road to Zero, Clean Growth and Clean Air Strategies and a commitment to end the sale of petrol and diesel cars and vans by 2040¹. Alternative fuels for vehicles, such as electric, gas (methane) and hydrogen, can have lower emissions than conventional fossil fuel vehicles.

Bromsgrove District has three air quality management areas (AQMAs) where air pollution contravenes national standards. There are also direct correlations with hospital admissions and exacerbated air quality conditions as identified in Worcestershire Public Health's analysis for the Joint Strategic Needs Assessment (JSNA).

In 2015, five Clean Air Zones (CAZs) were mandated in the UK, one of which is in neighbouring Birmingham. Birmingham's CAZ will be in effect in 2020. Drivers of the most polluting vehicles will be charged on a per day basis when entering the CAZ. In reality this results in cars, private hire, taxis and LGVs that do not meet the emissions standards being charged £8 per day and HGVs, coaches and buses being charged £50 per day to drive in the CAZ.

Due to the Councils proximity to Birmingham, it is appropriate that adaptation is made to allow for the changing nature of vehicles on our roads to ensure residents, business and visitors are assisted in the transition to ULEVs.

¹ Road to Zero Strategy

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Bromsgrove District Council (BDC) are one of the partners to the Worcestershire Climate Change Strategy 2012-2020. This sets a target to reduce the county's carbon emissions from 2005 levels by 30% by 2020. From the latest available evidence (2005-2016²), the majority of reductions in local carbon emissions are in industrial and domestic sectors, with transport only showing a 10% reduction in Bromsgrove District.

3.10 ULEV charge point infrastructure

In order to futureproof for local needs, including for streets that do not currently have off-street parking provision, we will facilitate the creation of a comprehensive network of rapid/ultra-rapid charging hubs and destination charging facilities (visitor and workplace, including communal overnight locations) that is reliable, convenient, affordable and attractive. We will consider rural as well as urban needs. The electricity supply to this electric vehicle charging infrastructure should be from renewable energy sources.

It is our intention that all new homes, workplaces and visitor attractions, should have access to adequate electric vehicle charging infrastructure, where appropriate. The electricity supply to this electric vehicle charging infrastructure should be from renewable energy sources. We will work to achieve this though development and implementation of local planning policies in line with the National Planning Policy Framework and through enforcement of future Building Regulations which will incorporate requirements for electric vehicle charging infrastructure from 2020.

3.11 OLEV Ultra-Low Emission Taxi Infrastructure Scheme grant

The Council will need to procure a Charge point Operator (CPO) to contribute to final selection of suitable sites, provide 25% match funding, install, operate and maintain the taxi charge points, expecting around a 10 year contract for the original provider to gain interest.

Identification of EV taxi charge points sites has commenced during ongoing consultation with taxi operators and private hire drivers, North Worcestershire Economic Development and Regeneration (NWEDR), and Worcestershire Regulatory Services (WRS). Further work is required, including input from the procured Charge point Operator (CPO) and further liaison with Western Power Distribution (WPD) around grid capacity.

While the charging points funded will be specifically for taxis, the Council will seek to develop a public charging network to sit alongside the taxi charge points, maximising the financial efficiency of the grant funding as much of the installation costs will be shared. Officers intend to tender for a CPO at the earliest possible opportunity following approval of recommendations in this report.

² There is a two-year delay in the collation of national greenhouse gas figures.

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3.12 Joined-Up Approach

Worcestershire County Council (WCC) is in the preliminary stages of developing a county-wide strategy for ULEV provision. WCC as highways authority look after on street infrastructure and wider transport objectives. Their strategy will focus on technical standards and data analysis with particular regard to highways land.

The District level strategy sets out principles and actions that are tailored to our local situation. Worcestershire Regulatory Services (WRS) for BDC lead on creating air quality action plans for the District and BDC have responsibility for many of the off street car parks across the district, some business premises.

The County level and District level strategies therefore have a slightly different but complimentary focus. Any future reviews will aim for an integrated approach, as far as practically possible.

A North Worcestershire working group will ensure a joined up approach between councils and cross border. This including representatives from Bromsgrove District Council, Redditch Borough Council, Wyre Forest District Council, North Worcestershire Economic Development and Regeneration (NWEDR), Worcestershire Regulatory Services (WRS), Worcestershire County Council, Midlands Energy Hub and neighbouring Local Authorities. Minutes are also circulated to the BDC Strategic Planning Manager and Worcestershire Public Health.

Customer / Equalities and Diversity Implications

3.13 Should the Council choose not to deliver on delivering a ULEV strategy and action plan, this may lead to inequality in access to EV charging and the risk of increasing transport poverty, particularly relating to homes where home-charging is not possible and in rural areas.

4. <u>RISK MANAGEMENT</u>

- 4.1 If the OLEV grant taxi funding is not utilised in accordance with OLEV guidelines, the funding will need to be returned. This would jeopardise the taxi and private hire local business particularly with the Birmingham CAZ taking force in 2020.
- 4.2 The action plan will be regularly monitored and updated as appropriate to ensure actions are reflective of local needs and requirements and the developing ULEV industry.

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APPENDICES

Appendix 1 - Bromsgrove District Council ULEV Strategy and Action Plan Appendix 2 - Glossary of Acronyms

6. BACKGROUND PAPERS

None

7. <u>KEY</u>

None

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Bromsgrove District Council Ultra-Low Emission Vehicles Strategy

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Glossary

Acronym	Definition	
AQMA	Air Quality Management Area – Location where Nitrogen Oxide levels exceed the national maximum threshold. Councils are required to produce and implement plans to reduce emissions in AQMAs.	
EVSE	Electric Vehicle Servicing Equipment – effectively a generic term for electric vehicle charging points.	
ULEV	Ultra-low emission vehicle – defined as vehicles with emissions of CO2 below 75g/km or fully electric powered.	
WTW	'Well to wheel'. This describes the impacts of a vehicle fuel from production via distribution to usage.	
Types of mass market vehicles are described in Figure 1.		
Types of electric vehicle charging situations are described in Figure 2.		
Types of electric vehicle charger are described in Figure 3.		

ICE Internal Combustion Engine.	Motor	Traditionally petrol or diesel fuelled.
HEV Hybrid Electric Vehicle.		Conventional petrol or diesel ICE and a relatively small electric battery. Uses ICE and/or battery to power the car and uses energy from the ICE to charge the battery, depending on the situation. In certain driving conditions, this will lead to lower emissions.
PHEV Plug-in Hybrid Electric Vehicle.		HEV which has the ability to plug in and charge the electric battery from an external source. This gives the potential to further reduce emissions over a non-plug-in hybrid, especially if this electricity comes from a renewable source.
EREV Extended Range Electric Vehicle.		A plug-in electric vehicle, where there is also a small ICE. Energy from the ICE keeps the battery topped up and extends the range of the vehicle.
BEV Battery Electric Vehicle.		A plug-in electric vehicle using solely battery power.

Figure 1 Types of vehicle in mass-market production

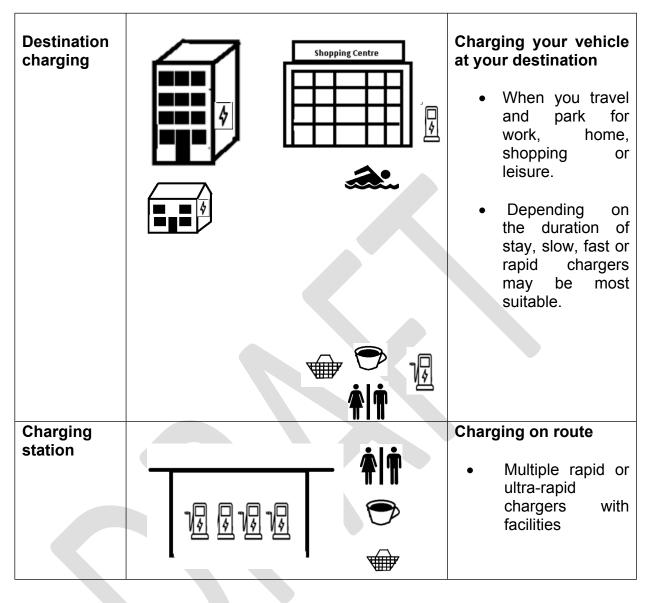


Figure 2 Types of charging situations

Trickle • Destination: Homes or Charger or workplaces Slow Charger 9 miles range in one hour¹ 3kWh power Fast Destination: **Shopping Centre** Charger Few hours stay Usually 21 miles range in one \$ \$ \$ 7kWh power hour Rapid **Destination:** Charger ~ One hour stay OR Up to 50kWh Quick top-ups on route • Up to 150 miles range in one hour Different cars have different connection types **Ultra-Rapid** Charging on route Charger 75-175 miles added in a 150 kWh 10minute charge 350 kWh Cars in development with compatible chargers. Vehicle to Can discharge power grid (V2G) from the vehicle back into building the or local network to provide power at peak times.² Upcoming technology.

Figure 3 Types of electric vehicle charger

¹ As a rule of thumb, range is increased in 20 minutes by same number of miles as the power rating in kWh

² EV Charging in Car Parks CENEX

Foreword

To be provided by CEO or Leaders

Also passages of support from e.g. NWEDR, WRS, Public Health, HOW College?

1. Vision, Aims and Objectives

1.1 Vision

A local area thriving in terms of local economic growth, public health, wellbeing and the environment, enabled by a sustainable travel network and a successful low carbon sector including ULEV related industry.

1.2 **Aims**

- i. To support the use of Ultra Low Emission Vehicles (ULEVs) in the area.
- ii. To support local economic activity and training opportunities in the ULEV industry.
- iii. To facilitate other actions to reduce vehicle related emissions.

1.3 **Objectives**

- i. Engage with local stakeholders to understand and address their needs in relation to ULEV technology.
- ii. To support and develop appropriate infrastructure for re-charging and refuelling ULEV vehicles.
- iii. To enable suitable opportunities for ULEV related business³
- iv. and training, including within the councils' commercialisation agenda.
- v. Work with other sectors such as communications, public health and sports development to explore other ways to reduce vehicle related emissions e.g. encouraging walking and cycling⁴ and decreasing vehicle idling.

³ See Appendix C Case Study Indra Renewable Technologies

⁴ See Appendix D Case Study Woo Bikes

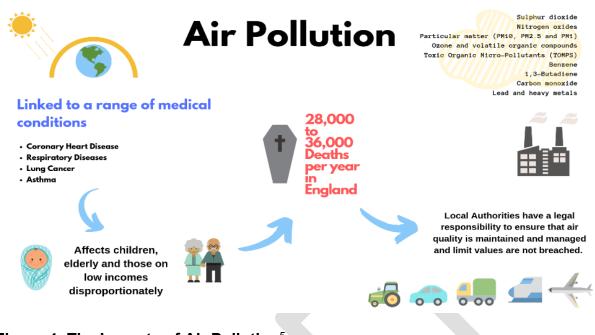


Figure 4: The Impacts of Air Pollution⁵

2. Setting the Scene

2.1 Introduction

There is a need nationally and locally to deliver economic growth along with improvements in public health, wellbeing and environmental welfare.

Diesel and petrol transport are key contributors to poor air quality, the largest environmental risk to public health in the UK. The annual mortality burden of humanmade air pollution in the UK is roughly equivalent to between 28,000 and 36,000 deaths. Costs to society are estimated at more than £20 billion every year.⁶ There is strong evidence that man-made greenhouse gas emissions, including from fossil-fuel based transport, will have serious consequences within decades if not checked⁷.

Bromsgrove District Council (BDC) need to take action to improve local conditions and provide resilience for our communities and industries, as well as contributing to a global solution.

Alternative fuels are available for vehicles, with lower emissions than conventional fossil fuel vehicles. National government have responded with the Road to Zero, Clean Growth and Clean Air Strategies and a commitment to end the sale of petrol and diesel cars and vans by 2040⁸. At a local level, all Worcestershire Councils and the Worcestershire Local Enterprise Partnership are committed to improve local air quality^{9,10,11} and to reduce greenhouse emissions¹².

⁵ Worcestershire Public Health Air Quality dashboard

⁶ Review of interventions to improve outdoor air quality and public health. Public Health England.

⁷ IPCC Special Report Global Warming of 1.5 degrees

⁸ Road to Zero Strategy

⁹ Worcestershire Climate Change Strategy

¹⁰ Worcestershire LEP Energy Strategy

The uptake of Ultra Low Emission Vehicles (ULEVs) in the UK presents a great opportunity to work towards a sustainable future and realise significant economic, social and health benefits. However it poses several challenges that need to be addressed, most notably the deployment of resilient re-charging and re-fuelling infrastructure.

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This strategy sets out how BDC will support the use of Ultra Low Emission Vehicles (ULEVs) and related economic activity in our areas. It recognises the importance to Bromsgrove of a sustainable travel network for residents, businesses, commuters and the visitor economy, and the need to attract growth industries that can provide local employment and education opportunities.

There is no intention to increase the number of vehicles on our roads, rather to enable residents across our areas to switch to ULEV's and facilitate other actions to reduce emissions and congestion.

Whilst much of the focus is currently on electric vehicles, innovation is happening all the time. It is important to be able to be ready to respond to future changes, therefore this strategy and action plan is designed to be flexible and responsive.

This strategy sets out national and local context along with our vision, aims and objectives and a proposed five year action plan. It will be reviewed as necessary to ensure that it remains fit for purpose.

¹¹ Worcestershire Air Quality Action Plan.

2.2 Scope of this strategy

2.2.1 Figure 5 below depicts the traditional fuel type and future alternative options for different vehicle types. These future options are applicable to both private vehicles and fleet, including council fleet.

Figure 5: Traditional fuels and future alternative of	options for vehicles
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	Fuel type		
Vehicle type	Traditional fuel	Transitional options	ULEV options
CarsSmall vansTaxis	 Petrol Diesel LPG¹³ 	HybridPlug-in hybridEREV	 BEV Hydrogen fuel cells (not mass market) Hydrogen ICE: concept vehicles only
 Large vans HGVs (including refuse collection vehicles and buses) 	• Diesel	 Methane: Compressed natural gas (CNG) Liquefied natural gas (LNG) 	 Some BEV and hydrogen fuel cell trials Hydrogen ICE: concept vehicles only

The only commercially viable ULEV option available at present is electric cars, vans and taxis. Therefore, this will be the focus of our current strategy and actions. However, we also outline below the options above that are still in development and our approach to emerging opportunities in relation to these technologies.

¹³ Liquid Petroleum Gas (LPG) – have NOx and particulate emissions similar to petrol and greenhouse gas emissions per mile are similar to diesel, therefore this is not a viable future option to support in the area

2.2.2 Natural gas (methane)

Compressed natural gas (CNG) from high pressure gas mains is a potential transitional fuel for larger vans and HGVs. Liquid Natural Gas (LNG), delivered to site in liquefied form, is an alternative where CNG is not feasible, including for long-haul HGVs as it has a higher energy density. Vehicles that use both CNG or LNG and diesel are also available, with less benefit in terms of emissions compared to fully gas-powered vehicles.

For CNG/LNG, air quality emissions are equivalent to Euro VI diesel. WTW CO₂ emissions for CNG and LNG are similar to diesel if operated on fossil natural gas, but up to ~85% if operated on bio-methane¹⁴. CNG/LNG vehicles are also quieter compared to ICE vehicles, reducing noise pollution in residential areas and alongside busy roads.

While there are no mass-market ULEV options for larger vehicles, we will be supportive of high quality, appropriately sited CNG/LNG operations using bio-methane, including local filling stations and associated anaerobic digestion. We will consider these options for larger vehicles in our council fleet including refuse collection vehicles.

2.2.3 Hydrogen

Hydrogen can be used to power vehicles by producing electricity using hydrogen fuel cells. Water is the only tail pipe emission. However refuelling infrastructure is currently very limited and hydrogen production varies in its emissions profile.

We will watch this technology closely¹⁵ and be supportive of investment in this industry in the area, provided there is a trajectory towards a lifecycle low emission profile.

¹⁴ Low Emission Technology Options for Local Authority Fleets CENEX

¹⁵ Birmingham City Council jointly won £2.8 million with TfL in 2016 for 42 state-of-the-art hydrogen fuel cell buses https://www.gov.uk/government/news/government-awards-30-million-funding-for-cleaner-greener-bus-journeys

2.3 Key drivers for a ULEV strategy in Bromsgrove District

2.3.1 Reduction in Emissions

ULEVs do not release any harmful tailpipe emissions and improve air quality when replacing ICE vehicles. When powered by renewable electricity, emissions are negligible. The UK is gradually decarbonising electricity production as renewable energy sources rapidly increase. Renewable electricity accounted for 29.3% of electricity generated in the UK during 2017¹⁶.

2.3.2 Improved Carbon Footprint

In the UK, the lifetime carbon footprint of an electric vehicle is lower than for an ICE vehicle, even when taking into account manufacturing, running and disposal¹⁷. Further gains can be brought about by facilitating alternatives to car use and also by increasing understanding that smaller lower range batteries are sufficient in many cases. There is significant opportunity to reuse degraded electric vehicle batteries for other purposes such as storage of renewable energy. Further development of batteries and recycling capability is a priority. The Midlands is leading the way in this respect¹⁸, with increased electric vehicle uptake likely to provide more of a commercial driver for these improvements.

2.3.3 Reduction in Noise Pollution

ULEV's operating by electric power is very quiet compared to ICE vehicles. This benefits residential areas and alongside busy roads as noise pollution is reduced.

2.3.4 Financial benefit for ULEV vehicles

BEVs are more economical to run when compared with traditional ICE vehicles, although the vehicles themselves are still relatively expensive to buy. However when drivers consider full lifetime (of the vehicle) cost, buying decisions sway towards ULEVs.¹⁹ Up-front purchasing cost for electric vehicles is predicted to be on a par with petrol and diesel models by 2024 in the UK, or earlier if subsidies towards purchase continue²⁰. As well as lower fuel costs, it is believed less maintenance will be required, as fewer moving

¹⁶ Renewable electricity accounted for 29.3% of electricity generated in the UK during 2017 UK Energy in Brief, DEFRA, 2018

¹⁷ Department of Transport, Transport Energy Model Report, 2018

¹⁸ https://www.gov.uk/government/collections/faraday-battery-challenge-industrial-strategy-challenge-fund

¹⁹ Science Direct; Total cost of ownership and market share for hybrid and electric vehicles in the UK, US and Japan (January 2018)

²⁰https://www2.deloitte.com/uk/en/pages/press-releases/articles/21-million-more-electric-vehicles-expected-worldwide-by-2030.html

parts are involved and regenerative braking increases life of braking components.

2.3.5 Commercial opportunities relating to the ULEV industry

This emerging market offers scope for local growth in the low carbon economy, building on the legacy of the region's motor, metals and manufacturing industries.

2.3.6 Limited Local Charge Point Infrastructure

There is insufficient accessible and reliable charging²¹, despite the increasing sales of electric cars. Restrictions by car manufacturer, business opening hours, charger reliability and ICE vehicles blocking charge points contribute to the inadequacy of the infrastructure. In order to increase public confidence, charge-points need to be reliable, convenient, affordable and attractive to use.

2.3.7 Households without access to home charging

Where residents can charge at home on drives or in garages, this is convenient and gives confidence to make a switch to ULEV, also enabling access to specialist electric vehicle tariffs with reduced costs depending upon time of use. These are not accessible to households with communal parking, on-street parking and where home-charging is unavailable for other reasons. We are aware of households of this type in Bromsgrove District, including terraced housing, apartments and other housing with communal parking including social housing.

²¹ See Appendix B for summary of local public electric charge-point infrastructure June 2019 Page 23

2.4 National Context

- 2.4.1 UK government view EV technology as an exciting opportunity for the UK, It is expected that the UK's automotive sector will need to become a leader in this area in order to remain a player in the global market. The shift from ICE vehicles to ULEVs is seen as essential in achieving the national decarbonisation targets whilst maintaining economic growth.²²
- 2.4.2 It is also recognised that ULEVs provide the opportunity:
 - i. To reduce greenhouse gases from the largest emitting sector
 - ii. An opportunity to reduce local air pollution; the second highest cause of avoidable morbidity in the country
 - iii. As a new industry with substantial export opportunities.
- 2.4.3 There will be more than 1M electric vehicles in use by 2020, which will require a total of 100,000 EV charging points but currently there are only **16,500 points** in the UK.²³
- 2.4.4 Road to Zero, 2018

This is the recently published government strategy in relation to ultra-low emission vehicles. It comes with an ambition to see at least half of new cars to be ultra-low emission by 2030 and a detailed 46 point action plan that provides us with an improved understanding as to where ULEV technology is seen to be heading from a government perspective. Its main aims are to:

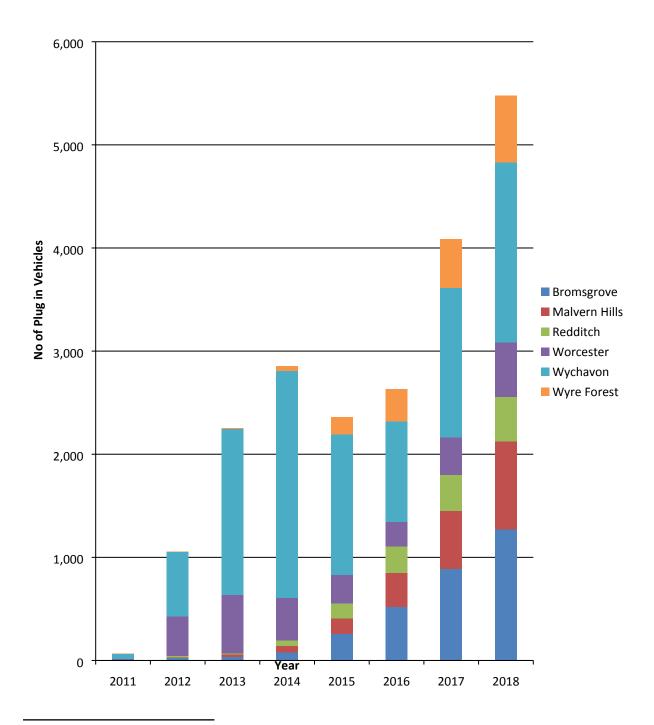
- Enable a massive expansion of green infrastructure across the country
- Reduce emissions from vehicles already on the UK's roads
- Drive the uptake of zero emission cars, vans and trucks
- End the sale of ICE cars and vans by 2040
- 2.4.5 The Clean Air Strategy (2019) echoes the end of sale of ICE cars and vans by 2040.

 ²² Electric Vehicle: Driving the Transition, the Business, Energy and Industrial Strategy Committee.
 House of Commons. 2018
 ²³ Source Zap Map

2.5 Local Context

2.5.1 The take up of ULEVs in the UK is steadily increasing with the number of plug in Vehicles registered reaching 144,000 in the first quarter of 2018. The local picture is following suit²⁴. Figure 6 below presents registration of plug-in cars and vans in Worcestershire. This increase is set to continue as additional ULEV models are introduced to the market in the coming years.

Figure 6: Number of plug-in cars, vans and quadricycles licensed in Worcestershire 2011-2018



²⁴ https://www.gov.uk/government/statistical-data-sets/all-vehicles-veh01 Page 25

2.5.2 Worcestershire Climate Change Strategy 2012-2020

This sets targets to reduce the county's carbon emissions by 30% from 2005 levels by 2020 and put in place measures to enable reduction by 80% by 2050. One of its stated aims is to develop smarter travel choices programmes (including smarter use of ICT to help residents avoid travel), and facilitate use of alternatively fuelled vehicles.

From the latest available evidence²⁵, the majority of reductions in local carbon emissions are in industrial and domestic sectors, as a result of a necessity to adapt to legislative and fiscal instruments. Transport only shows a 10% reduction.

Figure 7: Reduction in carbon emissions from 2005 to 2016* (%)

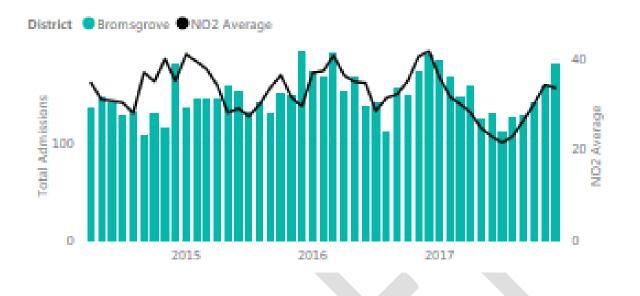
	Reduction per sector			
	Industry	Domestic	Transport	National/ Worcestershire target
Bromsgrove	-30	-30	-10	-30

*There is a two-year delay in the collation of national greenhouse gas figures

2.5.3 Air Quality

Bromsgrove District has three air quality management areas (AQMAs) where air pollution contravenes national standards. Recent research as part of Worcestershire Public Health's analysis for the Joint Strategic Needs Assessment (JSNA), has shown that hospital admissions with air quality exacerbated conditions, is often correlated with district level air quality.

²⁵https://www.gov.uk/government/collections/uk-local-authority-and-regional-carbon-dioxideemissions-national-statistics



Total Admissions and NO2 Average by Month Year and District

Figure 8: Air quality and hospital admissions in Bromsgrove ²⁶

2.5.4 Birmingham's Clean Air Zone (CAZ)

In 2015, the government revealed plans to improve air quality in cities, with the introduction of five CAZs, to be operational by 2020. The government mandated CAZ in neighbouring Birmingham will be in effect in 2020 and is an area where targeted action is taken to improve air quality, in particular by discouraging the most polluting vehicles from entering the zone.

No vehicle is banned in the zone, but those which do not have clean enough engines will have to pay a daily charge if they travel within the area. For cars, private hire, taxis and LGVs that do not meet the emissions standards this will mean a charge of £8 per day and HGVs, coaches and buses that do not meet the standards will be charged £50 per day to drive in the CAZ.

2.5.5 Worcestershire Local Enterprise Partnership Energy Strategy

In line with the 2018 IPCC report's focus on the need for more urgent decarbonisation in order to keep the world below 1.5 degrees of warming, this strategy aspires to a target of net zero carbon emissions for Worcestershire by 2040. In order to meet these more demanding goals, significant policy and funding commitments will be needed at a national as well as local level, such as a zero carbon national electricity network, enforcement of building control to zero carbon standards and commitment to bring forward the phase out date for high emission vehicles and include HGVs from where it stands currently at 2040.

²⁶ Worcestershire Public Health Air Quality dashboard

The strategy includes key measures of reducing carbon emissions by 50% on 2005 levels by 2030, doubling the size of the low carbon sector between 2016 and 2030 and tripling energy production from renewable generation by 2030.

Priority themes are interdependent and are as follows:

- i. Low carbon transport and active travel aiming for a fully connected hub of low carbon transport, including a comprehensive system of rapid chargers for electric vehicles, next generation low carbon public transport and safe active travel corridors.
- ii. Increasing clean economic growth
- iii. Overcoming infrastructure and development barriers delivering affordable clean energy.

It also aims to grow Worcestershire's low carbon sector, which is already an area of strength, with many innovative businesses in this area. The Low Carbon and Renewable Energy sector has outperformed the growth of the wider economy, with growth in turnover nationally of 5% from 2015 to 2016. With the Government putting Clean Growth at the forefront of its Industrial Strategy there is a clear opportunity to maximise the local benefits of this and keep growing Worcestershire's low carbon economy.

2.5.6 Worcestershire Local Transport Plan

Worcestershire's Local Transport Plan focuses on new transport infrastructure Schemes, with a number of policy and guidance documents that sit alongside, for example:

POLICY TCC2 – ULTRA-LOW EMISSION VEHICLES

Worcestershire County Council will adopt a proactive approach towards ultra-low emission vehicles (ULEVs) and associated infrastructure, in line with Government policy. For example:

- Expand on its existing county-wide network of public charge points;
- Encourage businesses to provide workplace charging facilities for employees and customers;
- Ensure that developers are aware of ULEV guidance provided in the Streetscape Design Guide;
- Support access to charge points for residents without off-street parking;
- Facilitate (where possible) adoption of new and improved technologies and charging infrastructure developments (such as easy payment access);
- Explore the provision of dedicated charge points for taxi and private hire operators;

- associated infrastructure;
 Work with partner organisations to support educational programmes that
- Work with partner organisations to support educational programmes that encourage the take-up and use of ULEVs; and
- Develop business cases and funding bids to access the funds needed to implement ULEV measures.
- 2.5.7 Bromsgrove District Local Plan

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- As part of the National Planning Policy Framework (NPPF), these set out the Councils planning policies that shape and regulate local development.
- They reflect national aims to reduce carbon emissions, improve quality of life and health of residents and aim to conserve and improve the character and quality of the environment whilst promoting economic growth. They recognise that new and existing low carbon communities will be highly accessible and attractive.
- Several policies highlight low carbon, sustainable vehicle infrastructure as key to delivering the visions of these strategic plans.
- 2.5.8 Bromsgrove District Strategic Plans

These set out the Councils principles, strategic purposes and priorities.

- Be corporately responsible by ensuring we meet our ethical, environmental and social responsibilities, and that services support our communities to develop.
- Constantly innovate, to make the best use of our resources to ensure we deliver efficient, quality services and eliminate waste.
- Make decisions and provide challenge based on data, evidence and learning.
- Use the Council's unique position in the community to encourage and support change amongst partners and other agencies.

Our strategic purposes are as follows:

- 'Help me to run a successful business'
- 'Help me to be financially independent';

Priorities to be worked on with partners involve supporting local business, encouraging inward investment, supporting training that meets employer skill needs and enabling employment opportunities.

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• 'Help me to live my life independently'

Priorities include working with health and other partners to reduce hospital admissions and keep people in their own home, enabling access to appropriate transport, supporting physical activity and supporting access to work, education and training.

'Keep my place safe and looking good'

Gives priority to reducing emissions and limiting the effect of climate change, including working with our communities. This also includes working with stakeholders to improve the infrastructure for cycling and walking.

• 'Provide good things for me to see, do and visit'

Envisions vibrant and flourishing town and local centres and aims to utilise our Councils' facilities to promote healthy lifestyles.

3 Our Approach

3.1 Joined-Up Approach

- 3.1.1 Worcestershire County Council (WCC), as highways authority, is in the preliminary stages of developing a county-wide policy for ULEV infrastructure. BDC will engage with the development of this policy.
- 3.1.2 The BDC strategy sets out principles and actions that are tailored to our local situation. BDC have responsibility for many of the off street car parks across the district, leisure centres, some business premises and lead on creating air quality action plans.
- 3.1.3 The County level and District/Borough level strategies therefore have a slightly different but complimentary focus. Any future reviews will aim for an integrated approach, as far as practically possible.
- 3.1.4 A North Worcestershire working group has been set up to ensure a joined up approach between councils and cross border. This including representatives from Bromsgrove District Council (BDC), Redditch Borough Council (BDC), Wyre Forest District Council (WFDC), North Worcestershire Economic Development and Regeneration (NWEDR), Worcestershire Regulatory Services (WRS), Worcestershire County Council (WCC), Midlands Energy Hub and neighbouring Local Authorities. Minutes are also circulated to the BDC Strategic Planning Manager and Worcestershire Public Health.

3.2 Approach to electric vehicle charging infrastructure

- 3.2.1 In order to futureproof for local needs, including for streets that do not currently have off-street parking provision, we will facilitate the creation of a comprehensive network of rapid/ultra-rapid charging hubs and destination charging facilities (visitor and workplace, including communal overnight locations) that is reliable, convenient, affordable and attractive, considering rural as well as urban needs.
- 3.2.2 It is our intention that all new homes, workplaces and visitor attractions, should have access to adequate electric vehicle charging infrastructure, where appropriate. We will work to achieve this though development and implementation of local planning policies in line with the National Planning Policy Framework and through enforcement of future Building Regulations which will incorporate requirements for electric vehicle charging infrastructure from 2020.
- 3.2.3 On-street charging is the jurisdiction of Worcestershire County Council where the land is adopted by WCC Highways.

- 3.2.4 Where the land is under the control of Bromsgrove District, suitability for onstreet charging solutions will be assessed on a case by case basis and will be supported where it is deemed to be practical, cost-effective and low risk. We do not anticipate that on-street charging e.g. via lampposts will be a practical solution in most cases however, for a number of reasons:
 - The need for lampposts to be at the front edge of the pavement.
 - Significant upgrading of the electrical infrastructure associated with the lampposts is usually required.

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- Trailing charging leads create a potential hazard, especially for those with visual impairment.
- Could potentially cause or exacerbate conflict when on-street parking spaces (with a charging facility or otherwise) are in high demand.
- 3.2.5 The electricity supply to electric vehicle charging infrastructure should be from renewable energy sources.

3.2.6 Site Selection

In order to ensure that installations of charge points are fit for purpose, we advise that the following criteria be used to assess potential locations.

General		
Site Conditions including safety, accessibility, security	Potential for expansion of charging points if required	
Closeness to existing/proposed chargers	Statutory Utilities	
Potential for onsite renewable electricity generation	Grid constraints/ opportunities for demand management;	
Links and proximity to AQMAs	Potential for contributing to or alleviating congestion	
Cost of implementation		
Destination chargers		
Proximity to key destinations such as leisure, retail, housing without off-street parking	Impact on parking supply	
Ultra-rapid charging hubs		
Proximity to key routes	Highways access	
Proximity to refreshments and toilets		
	I	

3.2.7 Type, location and numbers of charging points

Fast charging points (7 kWh) are considered to be the most appropriate charging level at public car parks or major destinations where a three or four hour stay is realistic. Slow chargers (3.5 kWh single phase) are considered to be the best option in business parks for daytime charging. Rapid chargers (≥43 kWh in appropriate locations close to major routes in places where stay is usually around one hour. Ultra-rapid charging hubs (150-350-kWh chargers) are ideal for those needing a quick top-up on route and would be ideally located near to refreshment and toilet facilities.

This will enable a mix of chargers for those needing a quick charge, those looking to stay somewhere for a minimum of a morning or afternoon and also for those parking all day at work.

Locations for electric vehicle charge-points should be attractive, visible and safe and the process of charging should be straightforward. There should be multiple chargers at a location and a high priority should be given to reliability.

The numbers of chargers needed across the area is hard to estimate as multiple variables including car-ownership, battery size of cars, daily distance travelled. The best approach is to have accessible destination charging at parking at all main trip attractors, with consideration given to future proofing in terms of minimising additional civil works required for electricity supply if demand increases and in terms of compatibility with vehicle charging technology, and simple payment methods.

3.2.8 Accessibility of charging-point spaces

All electric charging points should be designed to be accessible to all, with consideration given to accessibility of associated facilities by all. However, traffic control orders will not be used to prevent able-bodied drivers from using any electric vehicle charging points, nor to allow blue badge holders to park in an electric vehicle charge-point space when they are not going to be charging a car. The number of parking spaces designated as accessible and reserved for blue badge holders or parents and children by a traffic control order would remain unchanged.

3.2.9 Operation of proposed charging infrastructure

Management options of charging points have been assessed by other councils²⁷ and the outcome shows that in the short term (next five years) the preferred option will be a third party managing the public charging infrastructure. This has a number of advantages which are summarised below:

- Benchmarking shows that this is the option preferred by other local authorities that have already installed charging points at their car parks.
- BDC could be at disadvantage compared with experienced operators as we don't have the level of expertise or resource to be the scheme operator across a wide network of charge points.
- There is a risk of negative public perception towards BDC in case of poor performance of the charging points.
- Opportunity to connect electric vehicle charging point infrastructure in BDC to a network of charging points across the country.
- A third party operating the charging points will potentially be a better use of public money and better for the user. Should engagement on this draft strategy ratify this approach then the procurement procedure will be reported through the appropriate council meetings.

²⁷ Harrogate Borough Council Ultra-Low Emission Vehicle Strategy Final Report 2019-2024 Page 35

3.2.10 Funding installation of EV Charge-points on council land

Where appropriate grant-funding options will be sought as the first option.

Rapid/Ultra-rapid charging infrastructure

Where such chargers are sited on council land, we will aim to generate an income towards provision of public services, through leasing of land and income sharing.

The council recognises that operators will be generating revenue from the sale of electricity.

Our aim will be for these chargers to be open access allowing contactless payment via a credit or debit card²⁸, in line with legislation to improve accessibility of the public charging infrastructure²⁹,³⁰.

Provision of slower charging infrastructure will be considered when procuring rapid/ultra-rapid charging infrastructure or leasing land for that purpose, especially where there is potential to undertake works synergistically and decrease capital costs.

Slower charging infrastructure

To help enable slower charging infrastructure to be installed on suitable council sites, we will consider other mechanisms of revenue generation such as parking permits, charging permits, income from associated spend at sites and innovative opportunities e.g. providing grid services such as demand management.

The council recognises the potential to generate revenue from operating slower chargers is restricted by the limited kWh that can be provided.

²⁸ https://www.zap-map.com/charge-points/public-charging-point-networks/

²⁹ The Alternative Fuels Infrastructure Regulations 2017

3.2.11 Parking Fees

Parking fees will remain in public car parks for BEV users as it is important, for congestion management purposes, to ensure that car use is not incentivised over other sustainable modes of transport.

3.2.12 Affordability/Transport Poverty

The upfront cost of EVs are still high at present and charges should not be so high as to dis-incentivise take up e.g. higher lifetime cost or higher running cost than petrol/diesel. Consideration should be given for not worsening and if possible improving equality and this is particularly relevant for those without home charging at present.

3.2.13 Charging bay enforcement

Parking bays with electric vehicle charging infrastructure included must be used only by electric vehicles that are plugged in and charging and require a time restriction to prevent abuse. This will be proportionate to the type of charger associated with the recharging bay. These bays will be supported by new Traffic Regulation Order (TRO) and will be signalised by DfT approved signs.

3.2.14 Innovative technology

The use of innovative technology to support the proposed charge points will be considered. For instance, installing solar panels and battery storage at appropriate locations or implementing demand management. Further to this we will look at integrated smart car-parking and EV point management technology and software.

4. Action Plan

To deliver the objectives an action plan has been established. As electric vehicle charging is very much an emerging technology it is important for the council to be able to adapt to changes and ensure a flexible approach to delivery of the strategy. The action plan will, therefore, be reviewed as required to ensure adaptability to changes in technology, trends in mobility and financial considerations. The Action Plan is outlined in Appendix A.

Appendix A Bromsgrove Action Plan

Action		completion			1		Progress & Comments
	Review current funding opportunities and		2	3	4	5	
1	Review current funding opportunities and consider applying to Department For Transport (DFT) / Office for Low-Emission	0	Ongoing				Officers successfully bid for Ultra-Low Emission Taxi Infrastructure Scheme: round 2
	 Vehicles (OLEV) grants if applicable. Current grants include: Workplace charging scheme On-street residential charge point scheme Ultra-Low Emission Taxi Infrastructure Scheme: round 2 						Meeting with WCC and other District LAs to look at the possibility of a Worcestershire-wide bid for the On-street residential charge point scheme (which can now include off- street car-parks).
2	Identify possible locations for charge points. This will involve considering the following along with the site selection criteria:	Ongoing					Monitor requests for public charge points through BDC /WCC website, social media, contact centre, MP enquiries and direct contacts to relevant staff. Criteria for appraising such request will be developed.
	 Demand Availability of land /parking spaces Type of charge points Feasibility such as the cost of installation Security of car parks Accessibility 						Identification of charge points has started as this was required for submission of the ULEV bid. Consultation with Taxi operators and private hire drivers, NWEDR, WR & WCC was undertaken and this point and discussions are still ongoing.

3	 Review Council Fleet (and use of grey Fleet) Utilise free fleet reviews and other related support Plan for migration to alternative fuel options 		Work with other waste collection and disposal authorities and commercial operators to investigate the possibilities for anaerobic digestion that may come with the national mandatory food waste collection and the potential to use this to produce bio-methane for vehicles.
4	Review current parking strategy and parking management policy for the District and for Council employee car parks, to ensure consideration is given to ULEV charge points and appropriate parking bays.		Discussions have been held internally and with Wychavon Parking Services to investigate the various mechanisms of payment for parking against the needs of charge points. Most favourable currently is parking tickets as opposed to pay on foot and costly ANPR technology.
5	 Raise awareness of ULEVs through working with organisations to encourage the update of grants and provide relevant advice where appropriate through signposting and possible promotional events. Set up a local ULEV user group Develop links with relevant industries, education and businesses Develop a Communications plan Encourage low emission electric public transport options Education for second-hand car- dealerships on EVs via EST Work with local dealerships to promote new and used EVs 		

6	 Integrate ULEVs as well as the Council's wider sustainable transport agenda (promotion of public transport, walking and cycling) into all relevant Council policies and operations. Consider: EV pool cars Internal HR policies (e.g. mileage allowances etc) Review Taxi Licensing with respect to incentivising and enabling uptake of electric vehicles 		
7	Ensure the planning process is supportive of ULEV developments.	Ongoing	Discussions have been held internally with the Strategic Planning and Development Control Managers who are engaged to facilitate this.
8	Maximise use of renewable electricity and minimise grid implications. Consider renewables, local storage, smart chargers, V2G and behind the meter demand management.	Ongoing	Good links with key officers in WPD established. Good links with Midlands Hub Energy Advisor. WCC are part of a bid to a Pilot scheme with Virgin Media to link EV charging to their equipment cabinets.
9	Investigate communal charging facilities for those without access to personal home-charging charging e.g. social and private housing with communal parking areas. Work with other RSLs and private owners to learn from them and share or knowledge and experience Consider OLEV funding.		

10	Liaison with other public health agencies				Representation on Worcestershire Air Quality Partnership		
	in support of clean air policies.		ng		Group and North Worcestershire ULEV working group.		
	Work with sports development, HR,						
	Public Health and Parenting and						
	Community Team to integrate with the Councils Health and Wellbeing agenda						
11	Commercial opportunities for low carbon				E.g. leasing land for charge-points, investment in the low		
	economic growth. Consider opportunities to generate revenue to support public				carbon economy, revenue generation from grid services or optimising behind the meter usage, renewable electricity		
	services.	Ongoir	ig		generation e.g. solar car-ports, local energy storage, vehicle-		
					to-grid charging; leasing cars.		
					Via Land and Buildings Asset Group, areas of land		
					available for possible leasing have been identified and via		
					soft market testing there appears to be some interest.		
					Officers visited innovative ULEV technology company		
					Indra – an inspirational Malvern based technology		
					company that has teamed up with Ovo Energy and Nissan		
					to produce the world's first wall-mounted V2G Electric Vehicle charger that can also supply energy to the		
					electricity network Indra has a rapidly growing workforce		
					and aims to use local supply chains.		
					Further work is needed to investigate how we can best attract		
					and support such companies.		

12 Research, keep up to date with and contribute to government and other LAs policy, recommendations and projects on	Ongoing	Officers attended a Road to Zero best practice workshop and contacts have been established with the regional Energy Saving Trust Support Programme manager.
ULEVs.		In July 2018, the Automated and Electric Vehicles Act 2018 came into law and Government released its Road to Zero strategy. We will continue to monitor and review policies and strategies. Go Ultra Low is a joint government and car industry campaign providing information on switching to an electric vehicle.

Location	Destination			Rapid	Charging Network	Access	Location
	3kW	7kW	Other				
Hyundai Neale's Garage B60 2BS		2			Hyundai Dealership	Restricted	Bromsgrove
Bromsgrove Train Station B60 3LX		4			Polar		
Arbury Nissan B60 3AJ				1	Nissan Dealership	Restricted	
Westlands Toyota B60 3AJ		2			Polar	Restricted	
Grafton Manor B61 7HA บ			2 x 11 kWh Tesla only; possibly 1 all cars		Tesla Destination	Restricted	
ထို ngletons Nurseries B61 0HT ထိ			2 x up to 22kWh depending on car		Pod Point	Restricted opening hours	
Fire Safe Services B60 4AD		1			Other	Restricted	
Hopwood Park Services B48 7 UA				16 2	Tesla Supercharger	Restricted	
Asda B98 7ER		2			Ecotricity Polar		Redditch
Abbey Stadium B97 6EJ				1	Polar/Charge your Car Worcestershire County Council		
Robbins & Day Citroen B97 6RH		2			Pod Point		
Greenlands Business Centre B98 7HD				1	Polar/Charge your Car, Worcestershire County Council		

Appendix B Charge points available to the general public in vicinity of Bromsgrove District June 2019

Brickholes Farm B98 9DD		2			Other		
Webbs of Wychbold WR9 0DG				1	Polar/Charge your Car, Worcestershire County Council	Restricted opening hours	Droitwich
Chateau Impney WR9 0BN				1	Polar/Charge your Car Worcestershire County Council		
LidI Droitwich WR9 9RB				1	Podpoint		
Waitrose Droitwich WR9 8LB	2				Polar		
Longbridge Retail Park B31 2UQ	2	6			Other		Birmingham
Longbridge Technology Park B 3 1 2TS			5		Hubsta, Polar		
段ngs Court Hotel B49 5QQ				1	Polar		Stratford
Accester Road Service Station WR74DB				2	Instavolt		Wychavon

Appendix C Case Study: local economic activity and training opportunities in ULEV industry

Indra Renewable Technologies

Earlier this year the world's first widely available domestic electric Vehicle-To-Grid (V2G) Charger and EV Smart Charger were released. These products were developed and manufactured by Indra Renewable Technologies in Malvern, Worcestershire, a fast-growing electric vehicle and smart energy technology company, as part of an Innovate UK collaboration project with OVO Energy and Nissan.

The V2G Charger will optimise vehicle charging to take advantage of cheaper electricity when it's available and when there are more renewables on the system. The V2G charger also provides balancing services and can sell power back to the grid at peak time. This means that in theory, EV drivers using V2G may never have to pay to drive their car again.

Like the V2G charger, the Smart Charger enables EV's to be charged during off-peak hours, thereby easing pressure on the electricity grid, as well as allowing drivers to take advantage of cheaper off-peak electricity.

As well as electric vehicle charging technology, Indra also produce a Home Energy battery system and Indra's EV Service Centre specialises in EV battery upgrades, OEM repairs and EV diagnostics, catering for a growing EV aftersales market.

Mike Schooling, Founder and Chief Technical Officer of Indra, started working on electric car technology as a hobby in 2011, when he was 19 years old. Indra was formed in 2013, when operations moved out of Mike's spare bedroom in Malvern into a 2,000 sq ft industrial unit. The business and projects continued to grow and in 2018 transitioned into a modern, state of the art, 25,000 sq ft warehouse in Malvern, Worcestershire, with a 26-strong and growing team developing clean technology solutions, focused on accelerating the global transition to EV's.

Mike is passionate about using local supply chain and workforce where possible and feels there is a real need in Worcestershire for suitable business premises to enable this industry to grow throughout the county.

Indra were winners of the award for 'Excellence in Innovation' at Herefordshire and Worcestershire Chamber Business Awards 2018 and are finalists again in 2019, for two categories; 'Excellence in



Innovation' and 'Small Business of the Year'.

Appendix D Case Study: Woo Bikes



Woo Bikes – City bike share pilot

What is it?

Since 2010/11 the University of Worcester has operated a short term <u>bike share scheme</u>. This 50 bike scheme has increased in popularity in each year of operation. Students and staff can join for an annual £45 fee then borrow bikes at no extra cost. Members hire pedal bikes for a 7 day period and return them to two locations, City and St Johns Campus reception. Members are issued free helmets and lights and bikes can be used and locked anywhere. There is a small daily fine £2 for late returned bikes.

Woo Bikes extends this scheme by adding an additional 50 electric bikes, or e-bikes. These bikes have a battery, you ride it like a normal bike, but as soon as you pedal, the motor gives riders a boost whenever you need it. These bikes have no gears, you pedal to go faster, brake to slow. Members can hire e-bikes for a 24 hour period with a £4/day late return fee.

Why are we doing this?

One of the key aims of the scheme is to enable a 'try before you buy' approach to encourage our community to cycle. We anticipate that those who try, and become regular users, may commit to buying their own bike. The City is experiencing increased car congestion. There is an increase in single occupancy car use and there is an increase in both University students and staff using cars, including driving between University sites. It is likely that these trends are adding to air pollution in key City road corridors. The City is also experiencing a fall in cycling. The aim is to offer a wider travel choice as part of an overall strategy to manage congestion; reduce travel costs and support healthy living styles.

Research supported by central government in e-bike hire schemes across the country concluded that e-bike share schemes "widen the appeal of cycling" and particularly "supports the switching to e-bikes from up to 5-mile car journeys, compared to 3-mile car journeys for conventional cycling". This meets the profile of car commuting in and out of Worcester City and the hilly nature of the City.

What is it trying to achieve?

Encouraging potential new students to not even contemplate bringing a car with them when they apply to study in Worcester. Reducing the number of commute journeys by people who currently drive on their own to work or study and live within 5 miles of their destination.

Who is it for?

Initially for University of Worcester students and staff and rolling it out to other major employers and Worcester citizens.

When did it start?

At the University of Worcester 12th February 2018 and expanded into Worcester City with students' leading on have a go sessions from 17th April 2018.

Who are the partners?

Worcestershire Local Enterprise Partnership, Worcestershire County Council, Worcester City Council, Gtech, Emily Jordan Foundation and the University of Worcester.



Acronym	Definition
AQMA	Air Quality Management Area – Location where Nitrogen Oxide levels exceed the national maximum threshold. Councils are required to produce and implement plans to reduce emissions in AQMAs.
CAZ	Clean Air Zones.
СОР	Charging Point Operator - A company that operates a network of electric vehicle charging points, including repair and maintenance, associated software, data and payment mechanisms. May also manufacture and install charging points.
EV	Electric Vehicles.
EVHS	Electric Vehicle Home Charge Scheme – An OLEV grant scheme to subsidise home electric vehicle charging points for electric vehicle owners/users with a dedicated parking space associated with their home.
EVSE	Electric Vehicle Servicing Equipment – effectively a generic term for electric vehicle charging points.
LBAG	Land and Building Assets Group – a subgroup of the internal Commercialism Board.
ULEV	Ultra-low emission vehicle – defined as vehicles with emissions of CO2 below 75g/km or fully electric powered.
OLEV	Office for Low Emissions, government department reporting to both the Department of Business, Energy and Industrial Strategy (BEIS) and the Department of Transport (DoT)
WCS	Workplace Charging Scheme – An OLEV grant scheme to subsidise work-place electric vehicle charging points.

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Overview & Scrutiny Committee

8th July 2019

Staff Survey Update Briefing

Background

In December 2017 Bromsgrove and Redditch Councils conducted a joint employee engagement exercise through the use of a staff survey. As previous staff surveys had elicited low response rates the decision was taken to explore a different approach to seeking the views of our employees.

Through a workforce engagement project being conducted by the Local Government Association (LGA) the Councils engaged with Martin Reddington Associates (MRA). This company specialise in employee engagement through the use of their bespoke methodology, referred to as The Employment Deal Diagnostic (TEDD). The TEDD diagnostic tool is defined by MRA as:

"understanding engagement as a process and not as a fixed state. Research stresses that engagement is encouraged and experienced through the employment relationship. A highquality employment deal is one where there is a balanced, reciprocal exchange of contributions"

The diagnostic tool uses a set of predefined questions linked to the methodology, to focus on three key areas within the survey to assess both the employer and employee contributions to the 'employment deal', with particular focus on the view of the workforce. These three areas are:

- **The Balance of the Deal** how they (workforce) view their contribution in the workplace against what the organisation offers them;
- **Conversational Practice** the perceived quality of discussions within the workplace and how this is balanced out by workplace tensions and job pressures;
- **Perceived Personality of the Organisation** how staff experience the organisation as a "personality".

The response rate to the survey was 54% which was a significant increase from our last survey in 2016 and compared favourably with response rates at other councils across the country. The overall feedback from the survey was also good with a lot of responses to the questions falling in the 'mid-range' which was positive and encouraging. These results were also consistent when benchmarked against other similar organisations. There were a few areas which were highlighted where particularly good practice takes place and a few which identified areas to address.

The Staff Survey Joint Scrutiny Task Group had recommended that some members of the group be involved in the process prior to carrying out the survey. As a consequence of this recommendation, prior to undertaking the survey, ClIrs Colella and Potter were invited to a

meeting with Martin Reddington to discuss the staff survey and explain how the new methodology would work.

In addition to this, in 2018 the Leaders and Deputy Leaders of both Councils were also invited to meet with Martin to discuss the staff survey, methodology and the findings for both Councils.

Current activity

The findings from the last staff survey have been used to assist in the development of a more holistic approach to organisational culture and employee engagement. A great deal of work has been carried out over the past year to explore and understand the wider culture of both organisations. This work, alongside the findings from the staff survey, have resulted in the development of a more connected approach, which will be shared with the workforce later this year, which clearly defines how everyone contributes to the councils strategic purposes.

This approach endeavours to link the use of a number of tools and processes such as staff appraisals, one to one meetings, the skills matrix, staff training, staff development, management and leadership development, organisational principles and staff survey actions to the performance of the wider organisation, its culture and the delivery of services to customers.

It is the intention that a further staff survey will be undertaken and the end of 2019 using the TEDD methodology, this will enable the councils to directly compare the results with the previous survey.

In respect of the recommendations made by Cabinet on the 6th September 2017 if Members wish to be briefed prior to the launch of the next staff survey, officers are happy to arrange this as necessary.



CABINET LEADER'S WORK PROGRAMME

1 AUGUST 2019 TO 30 NOVEMBER 2019 (Published as at 1st July 2019)

This Work Programme gives details of items on which key decisions are likely to be taken in the coming four months by the Council's Cabinet

The Work Programme gives details of items on which key decisions are likely to be taken by the Council's Cabinet, or full Council, in the coming four months. **Key Decisions** are those executive decisions which are likely to:

- (i) result in the Council incurring expenditure, foregoing income or the making of savings in excess of £50,000 or which are otherwise significant having regard to the Council's budget for the service or function to which the decision relates; or
- (ii) be significant in terms of its effect on communities living or working in an area comprising two or more wards in the district;

why you wish to make representations on the proposed decision you are encouraged to get in touch with the relevant report author as soon as consible before the proposed date of the decision. Contact details are provided, alternatively you may write to the Head of Legal, Equalities and Democratic Services, Parkside, Market Street, B61 8DA or e-mail: <u>democratic@bromsgroveandredditch.gov.uk</u>

The Cabinet's meetings are normally held every four weeks at 6pm on Wednesday evenings at Parkside. They are open to the public, except when confidential information is being discussed. If you wish to attend for a particular matter, it is advisable to check with the Democratic Services Team on (01527 881443) to make sure it is going ahead as planned. If you have any queries Democratic Services Officers will be happy to advise you. The full Council meets in accordance with the Councils Calendar of Meetings. Meetings commence at 6pm.

CABINET MEMBERSHIP

Councillor K J May	Leader of the Council and Portfolio Holder for Economic Development, the Town Centre and Strategic Partnerships
Councillor G N Denaro	Deputy Leader and Portfolio Holder for Finance and Enabling (including Governance/Policy and Performance/HR)
Councillor S Webb	Portfolio Holder for Strategic Housing and Health and Well Being
Councillor A Kent	Portfolio Holder for Planning and Regulatory Services
Councillor M Sherrey	Portfolio Holder for Environmental Services
Councillor P Thomas	Portfolio Holder for Leisure, Cultural Services and Community

Decision including Whether it is a key Decision	Decision Taker Date of Decision	Details of Exempt information (if any) and information explaining why items have been postponed (where available)	Documents submitted to Decision Maker / Background Papers List	Contact for Comments
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Members ICT Policy Key: No ອ	Cabinet Not before 4th Sep 2019	Transformation and	Mark Hanwell, ICT Transformation Manager Tel: 01527 881248 Councillor G. N. Denaro
®romsgrove Council Plan ∰ ey: No	Cabinet 4 Sep 2019	Transformation and	Rebecca Green, Policy Manager Tel: 01527 881616 Councillor G. N. Denaro
Equality Impact Assessments (EQIAs) Key: No	Cabinet 4 Sep 2019	Transformatin	Rebecca Green, Policy Manager Tel: 01527 881616 Councillor G. N. Denaro

Decision including Whether it is a key Decision	Decision Taker Date of Decision	Details of Exempt information (if any) and information explaining why items have been postponed (where available)	Documents submitted to Decision Maker / Background Papers List	Contact for Comments
North Worcestershire Economic Growth Strategy Key: No	Cabinet 4 Sep 2019 Council 25 Sep 2019			Ostap Paparega, Head of North Worcestershire Economic Development Tel: 01562 732192 Councillor K. J. May
Fromsgrove District Council's Local Plan Review Issue and Options Consultation Response/Call for Sites/Further Consultation Key: No	Cabinet 4 Sep 2019 Council 25 Sep 2019		Report of the Head of Planning and Regeneration	Mike Dunphy, Strategic Planning and Conservation Manager Tel: 01527 881325 Councillor A. D. Kent

Decision including Whether it is a key Decision	Decision Taker Date of Decision	Details of Exempt information (if any) and information explaining why items have been postponed (where available)	Documents submitted to Decision Maker / Background Papers List	Contact for Comments
Bromsgrove Sports and Physical Activity Strategy Key: No	Cabinet 4 Sep 2019	This item has slipped from 10 January 2018 due to changes in the way activity levels are monitored by Sports England.	Report of the Head of Leisure and Culture	Dave Cove, Interim Head of Leisure and Cultural Services Councillor P. L. Thomas
®udget Framework Report ⊈key: No	Cabinet 4 Sep 2019		Report of the Executive Director, Finance and Resources	Chris Forrester, Financial Services Manager Tel: 01527 881673 Councillor G. N. Denaro
Finance Monitoring Quarter 1 Report Key: No	Cabinet 4 Sep 2019		Report of the Executive Director, Finance and Resources	Chris Forrester, Financial Services Manager Tel: 01527 881673 Councillor G. N. Denaro

Decision including Whether it is a key Decision	Decision Taker Date of Decision	Details of Exempt information (if any) and information explaining why items have been postponed (where available)	Documents submitted to Decision Maker / Background Papers List	Contact for Comments
Review of the Customer Access and Financial Support Service Key: No	Cabinet 4 Sep 2019 Council 25 Sep 2019	This report may contain exempt information and therefore might need to be considered in private session.	Report of the Executive Director of Finance and Corporate Resources	Jayne Pickering, Executive Director (Finance and Corporate Resources) Tel: 01527 881207 Councillor G. N. Denaro
Review of the Council Tax Support Scheme Key: No	Cabinet 4 Sep 2019 Council 25 Sep 2019		Report of the Executive Director of Finance and Corporate Resources	David Riley, Revenue Services Manager Tel: 01527 64252 Councillor G. N. Denaro

Decision including Whether it is a key Decision	Decision Taker Date of Decision	Details of Exempt information (if any) and information explaining why items have been postponed (where available)	Documents submitted to Decision Maker / Background Papers List	Contact for Comments
Bromsgrove Enterprise Park - Acquisition Key: Yes ບັງ	Cabinet 4 Sep 2019	This report may contain some exempt information and therefore Cabinet may need to go into private session during consideration of this item.	Report of the Chief Executive	Ostap Paparega, Head of North Worcestershire Economic Development Tel: 01562 732192 Councillor K. J. May
Response to Worcestershire County Council - Worcestershire Passenger Transport Strategy Key: No	Cabinet 4 Sep 2019		Report fo the Head of Planning and Regeneration	Mike Dunphy, Strategic Planning and Conservation Manager Tel: 01527 881325 Councillor A. D. Kent
Response to Worcestershire County Council Minerals Local Plan pre-submission Veresion Key: No	Cabinet 4 Sep 2019		Report fo the Head of Planning and Regeneration	Mike Dunphy, Strategic Planning and Conservation Manager Tel: 01527 881325 Councillor A. D. Kent

Decision including Whether it is a key Decision	Decision Taker Date of Decision	Details of Exempt information (if any) and information explaining why items have been postponed (where available)	Documents submitted to Decision Maker / Background Papers List	Contact for Comments
Worcestershire Homelessness Strategy Review Key: No	Cabinet 4 Sep 2019		Report of the Head of Community Services	Derek Allen, Strategic Housing Manager Tel: 01527 881278 Councillor S. A. Webb
erformance Report - Help The Live My Life Independently Key: No	Cabinet 23 Oct 2019		Report of the Deputy Chief Executive	Rebecca Green, Policy Manager Tel: 01527 881616 Councillor G. N. Denaro
Cofton Hackett and Lickey and Blackwell Neighbourhood Plan Key: No	Cabinet Not before 23rd Oct 2019 Council Not before 20th Nov 2019		Report of the Head of Planning and Regeneration	Mike Dunphy, Strategic Planning and Conservation Manager Tel: 01527 881325 Councillor C. B. Taylor
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Decision including Whether it is a key Decision	Decision Taker Date of Decision	Details of Exempt information (if any) and information explaining why items have been postponed (where available)	Documents submitted to Decision Maker / Background Papers List	Contact for Comments	
Fees and Charges 2020/21 Key: No ອ	Cabinet 23 Oct 2019 Council 20 Nov 2019		Report of the Executive Director, Finance and Resources	Chris Forrester, Financial Services Manager Tel: 01527 881673 Councillor G. N. Denaro	
Medium Term Financial Blan Key: No	Cabinet 23 Oct 2019		Report of the Executive Director, Finance and Resources	Chris Forrester, Financial Services Manager Tel: 01527 881673 Councillor G. N. Denaro	
Domestic Abuse Policy - Identifying Abuse and Responding Effectively Key: No	Cabinet 23 Oct 2019 Council 20 Nov 2019		Report of the Head of Community Services	Bev Houghton, Community Safety Manager Tel: 01527 64252 Councillor P. L. Thomas	Agenda It
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Decision including Whether it is a key Decision	Decision Taker Date of Decision	Details of Exempt information (if any) and information explaining why items have been postponed (where available)	Documents submitted to Decision Maker / Background Papers List	Contact for Comments
Bromsgrove Plan Review - Local Development Scheme Key: No	Cabinet 23 Oct 2019		Report of the Head of Planning and Regeneration	Mike Dunphy, Strategic Planning and Conservation Manager Tel: 01527 881325 Councillor A. D. Kent
₽ ∰inance Monitoring Quarter ፼ Report ∰ey: No	Cabinet 4 Dec 2019		Report of the Executive Director of Finance and Corporate Resources	Chris Forrester, Financial Services Manager Tel: 01527 881673 Councillor G. N. Denaro
Medium Term Financial Plan Key: No	Cabinet 4 Dec 2019		Report of the Executive Director, Finance and Resources	Chris Forrester, Financial Services Manager Tel: 01527 881673 Councillor G. N. Denaro
Performance Report - Provide Good Things for me to see, do and visit Key: No	Cabinet 4 Dec 2019		Report of the Executive Director, Finance and Resources	Tracy Beech, Policy Officer Tel: 01527 64252 Councillor P. L. Thomas

Decision including Whether it is a key Decision	Decision Taker Date of Decision	Details of Exempt information (if any) and information explaining why items have been postponed (where available)	Documents submitted to Decision Maker / Background Papers List	Contact for Comments
Council Tax Base 2020/21 Key: No	Cabinet 15 Jan 2020 Council 22 Jan 2020		Report of the Executive Director, Finance and Resources	Chris Forrester, Financial Services Manager Tel: 01527 881673 Councillor G. N. Denaro
Medium Term Financial Plan Key: No	Cabinet 15 Jan 2020		Report of the Executive Director, Finance and Resources	Chris Forrester, Financial Services Manager Tel: 01527 881673 Councillor G. N. Denaro
Performance Report - Help me to find somewhere to live in my locality Key: No	Cabinet 15 Jan 2020		Report of the Deputy Chief Executive	Rebecca Green, Policy Manager Tel: 01527 881616 Councillor S. A. Webb

Decision including Whether it is a key Decision	Decision Taker Date of Decision	Details of Exempt information (if any) and information explaining why items have been postponed (where available)	Documents submitted to Decision Maker / Background Papers List	Contact for Comments
Capital Programme 2020/21 Key: No	Cabinet 12 Feb 2020 Council 26 Feb 2020		Report of the Executive Director, Finance and Resources	Chris Forrester, Financial Services Manager Tel: 01527 881673 Councillor G. N. Denaro
Medium Term Financial ∯lan - 2020/21 - 2023/24 Key: No	Cabinet 12 Feb 2020 Council 26 Feb 2020		Report of the Executive Director, Finance and Resources	Chris Forrester, Financial Services Manager Tel: 01527 881673 Councillor G. N. Denaro
Pay Policy Statement 2020/21 Key: No	Cabinet 12 Feb 2020 Council 26 Feb 2020		Report of the Executive Director, Finance and Resources	Becky Talbot, Human Resources and Development Manager Tel: 01527 64252 Councillor G. N. Denaro

Decision including Whether it is a key Decision	Decision Taker Date of Decision	Details of Exempt information (if any) and information explaining why items have been postponed (where available)	Documents submitted to Decision Maker / Background Papers List	Contact for Comments
Finance Monitoring Quarter 3 Report Key: No	Cabinet 18 Mar 2020		Report of the Executive Director, Finance and Resources	Chris Forrester, Financial Services Manager Tel: 01527 881673 Councillor G. N. Denaro
Berformance Report - Help Reformance Report - Help Dusiness Rey: No	Cabinet 1 Apr 2020			Rebecca Green, Policy Manager Tel: 01527 881616 Councillor K. J. May