

## OXFORDSHIRE COUNTY COUNCIL

### DRAFT SUBSIDY ASSESSMENT

**Project Name: Zero Emission Bus Regional Areas (ZEBRA)**

**Intended Recipient(s): Go Ahead and Stagecoach**

#### **Background Notes:**

- 1.1 The United Kingdom is obliged under the Climate Change Act 2008 to meet a net zero emissions target by 2050. As part of doing so, the government wishes to reduce carbon emissions across all types of transport, including buses, as well as increase bus use as a green mode of transport. It has previously provided financial support for this purpose through various programmes, for example, the Green Bus Fund,<sup>1</sup> the Low Emission Bus Scheme and the Ultra-Low Emission Bus Scheme. The government has stated that these have supported the introduction of over 1,900 cleaner and greener buses.
- 1.2 On 15 March 2021, the government published a bus strategy (**Bus Strategy**) (please see [here](#)), one of the key themes of which is more investment in cleaner and greener buses:

*“UK bus operators have invested over £1.3bn in cleaner and greener buses over the last five years, supported by £89m funding through the Government’s Low and Ultra-Low Emission bus schemes [1]. However, there is much more to do. The majority of these vehicles are hybrid or gas-powered and only around 2% of England’s bus fleet is fully zero emission today. This represents 4% of London’s fleet and 1% of the fleet in England outside of London.*

*Bus operators share our ambitions to achieve a zero emission bus fleet. Many have committed to purchase only ultra-low or zero emission buses from 2025, and to start this process by 2023 in some urban areas, if there is continued Government support towards the extra purchase and fuel infrastructure costs.[]”*

*Five principles underpin our roadmap to a zero emission fleet. They are:*

- We will consider all technologies fairly, assessing their cost, contribution to decarbonisation and utility.*
- We will provide the financial support and incentives needed for the market to scale up quickly.*
- We will take a place-based approach to investment wherever appropriate.*
- Both operators and LTAs [local transport authorities] must play their part.*
- We will ensure our plans for buses lead to overall carbon reductions.”*

1.3 The Bus Strategy includes a commitment to launch the Zero Emission Bus Regional Area (**ZEBRA**) scheme, *“bringing together LTAs, bus operators, energy companies and other stakeholders to develop financial and commercial models of delivering zero emission buses at scale, with government and non-government funding.”* The government’s intention is subsequently to *“scale up”* delivery to meet the Prime Minister’s related commitment to 4,000 new zero-emission buses. This should be seen in the context of his Ten Point Plan for a Green Industrial Revolution announced in 2020 (please see [here](#)). Point 5 of the Plan covers green public transport, cycling and walking, stating: *“We will fund thousands of zero-emission buses [ ] We will invest £120 million next year to begin the introduction of at least 4,000 more British built zero emission buses.”*

1.4 Against that background, the government is also analysing the results of a public consultation, which closed on 21 May 2022, on ending the sale of new diesel buses, and that followed an earlier consultation that closed in April 2021. According to the government’s webpage on the first consultation, this issue is linked to the Climate Change Committee’s Sixth Carbon Budget report (please see [here](#)), which includes advice about the need to reduce carbon emissions in *“surface transport”*, recommending that new diesel bus and coach sales should end by 2040 at the latest, with operators being encouraged to switch much sooner. It also states that local authorities should be empowered to continue driving zero-emission bus take-up.

1.5 In addition, the government published a transport decarbonisation plan (**TDP**) on 14 July 2021 (please see [here](#)). This sets out more clearly a coordinated approach to decarbonisation for all modes of transport and includes a detailed section on zero emission buses and coaches (pages 62-71). It repeats the government’s intention to support at least 4,000 new zero emission buses (which apparently represents the replacement of nearly 12% of England’s total local operator bus fleet), stating that it will invest up to £120 million in such buses in 2021 / 22 under the ZEBRA scheme, which could support the introduction of up to 500 zero emission buses and related infrastructure. The TDP also notes:

*“In addition to the wider co-benefits zero emission buses can bring, we would expect zero emission buses to achieve long term operating cost savings, which can be reinvested in more frequent services, lower fares, and other improvements for passengers.”*

1.6 The TDP highlights a commitment in the Bus Strategy to review the existing Bus Service Operators Grant (a discretionary grant that helps operators recover fuel costs), with one of the key objectives being to ensure that the funding stream is aligned with government priorities, in particular around benefitting the environment. It notes the need to address an imbalance between the support to diesel buses and support to zero emission buses. With this in mind, the TDP includes a commitment to consult on a proposed new funding regime:

*“[] to take a holistic approach targeted at the delivery of the policies in this plan, and other specific benefits; growing patronage, increasing efficiency, improving the environment and securing modal shift from the private car.”*

1.7 The Council as a county council has a wide range of statutory functions, including transport and highways, and in this context previously applied for funding from the government's All-Electric Bus Town fund. In June 2021, it submitted an Expression of Interest (EoI) to DfT for funding from the ZEBRA scheme on the basis that the funding criteria are more appropriate for its bus network. On 27 July 2021, the Council was one of 17 bidders selected under the standard process to progress to Phase 2 business case and on 26 March 2022 was selected as one of 12 authorities to benefit from ZEBRA funding. Five other authorities were selected in October 2021 to proceed under the fast-track process.

1.8 Under the ZEBRA scheme, a total of £270 million was available to fund zero-emission buses and supporting (i.e. charging) infrastructure. For vehicles, DfT will contribute up to 75% of the cost difference between a zero-emission bus and a standard conventional diesel bus equivalent with the same total passenger capacity. For infrastructure, DfT will contribute up to 75% of the capital expenditure incurred as a result of its purchase and installation. The proportion of grant funding towards eligible costs is the same as under the Ultra-Low Emission Bus Scheme referred to above, which covered up to 75% where the bus was able to operate in zero emission mode (and 50% for a bus that otherwise met the definition of an ultra-low emission bus). Eligible related infrastructure costs included the charging unit or re-fuelling station, electrical or other power components, civil engineering works, installation labour costs, hardware costs, capital costs of developing associated software systems and the capitalised cost of surveys at the point of procuring the infrastructure.

1.9 The ZEBRA scheme therefore supports the council's proposals such as the Oxford Zero Emission Zone, Central Oxfordshire Travel Plan, and Local Transport and Connectivity Plan 2022 – 2050 which outlines a clear vision to deliver a net-zero Oxfordshire transport and travel system that enables the county to thrive whilst protecting the environment and making Oxfordshire a better place to live for all residents.

1.10 The council's ZEBRA bid proposed passing ZEBRA grant funding to two Oxfordshire bus companies. The council has also agreed to provide additional grants to further support the two companies in order to make the ZEBRA scheme viable in Oxfordshire.

For subsidies in scope of the UK-EU Trade and Cooperation Agreement principles (within the subsidies chapter), the Council should complete the table below and retain for its records. The information should record how the Council has complied with the principles in designing their subsidy.

Principles	How does the subsidy comply with the principle?
<p>The subsidy should pursue a specific public policy objective in order to remedy an identified market failure, or to address an equity rationale (such as local or regional disadvantage, social difficulties or distributional concerns) (“the objective”).</p>	<p><i>The government’s specific public policy objective is to support the introduction of 4,000 new zero-emission buses under the ZEBRA scheme, in order to reduce carbon emissions and thereby meet its net zero emissions target by 2050. Relevant policy statements and documents include those around setting up the ZEBRA scheme, the Ten Point Plan for a Green Industrial Revolution and the transport decarbonisation plan (TDP).</i></p> <p><i>The overall rationale is that bus operators are not investing in zero emission vehicles and infrastructure in sufficient scale or fast enough and there is therefore an identified market failure requiring government intervention. The ZEBRA scheme has been set up to cover up to 75% of the cost difference between a new diesel bus and a new electric bus, and 75% of the cost of charging infrastructure.</i></p> <p><i>The Council’s objective in relation to both the ZEBRA Grant and the Additional Council Grant is the same, albeit on a smaller scale and taking into account local conditions, i.e. to stimulate the deployment of zero emission buses on the market to decarbonise transport and improve air quality as well as obtain other related benefits (listed below). The grant funding is necessary because electric buses are approximately twice as expensive as a diesel equivalent and charging infrastructure is also very expensive, which both discourage market investment. Broadly, electric buses are more expensive to purchase, operate and maintain, even taking into account fuel savings.</i></p> <p><i>Oxford has a modern diesel bus fleet, with significant investment in the latest vehicles in the last five years. As a result, few buses are due for replacement in the next few years. There is therefore an overall lack of commercial justification for investing in electric vehicles and related charging infrastructure, which has been compounded by the impact of the pandemic on bus use, which remains at around [75%] of pre-pandemic levels.</i></p> <p><i>The Council has identified that supporting a move from diesel to electric propulsion in the bus fleet should deliver the following benefits:</i></p> <ol style="list-style-type: none"> <li><i>1. cleaner air (buses contribute up to 70% of roadside nitrogen dioxide pollution in the busiest locations in Oxford);</i></li> </ol>

	<p>2. <i>reduced carbon emissions: estimated 6000 tonnes / year saving;</i></p> <p>3. <i>reduced noise;</i></p> <p>4. <i>increased bus patronage.</i></p> <p><i>The council acknowledged the climate emergency in 2019, and is taking urgent <a href="#">climate action</a>.</i></p> <p><i>In summary, the subsidy is required to support a number of <a href="#">local</a> and <a href="#">national</a> policy aims, including accelerated transport decarbonisation, boosting bus use, reducing car travel, and improving air quality.</i></p> <p><i>As wider context, it is clear from the overarching TCA principles and objectives (see paragraph 10 of Schedule 1) that subsidies for environmental protection are viewed positively as public policy objectives. This is also evidenced by the special category covering them. The Subsidy Control Act 2022 (partially in force) also mirrors this.</i></p> <p><i>It is worth noting that State aid can, where those rules still apply, be provided compliantly under Article 36, GBER to support the acquisition of new transport vehicles for road by funding the extra investment costs necessary to go beyond the applicable Union standards. GBER has also recently been amended to include a new exemption for aid for publicly accessible recharging or refuelling infrastructure for the supply of electricity and hydrogen to zero and low emission road vehicles for transport purposes (Commission Delegated Regulation (EU) 2021/1235 of 12 May 2021).</i></p>
<p>The subsidy should be proportionate to its specific policy objective and limited to what is necessary to achieve it.</p>	<p><i>Provision of ZEBRA Grant only</i></p> <p><i>The ZEBRA scheme has a pre-defined intensity limit of up to 75%. The DfT limit has been calculated as the amount necessary to achieve the scheme's objective of encouraging bus operators to acquire zero-emission buses and the related charging infrastructure.</i></p> <p><i>In the government's previous scheme for Ultra-low emission buses (<b>ULEB</b>), the same intensity limit was used (which was reduced from 90% under the previous Low-emission bus</i></p>

scheme). The ULEB scheme was approved by the European Commission as State aid compliant and allowed grant funding for new ultra-low emission buses and related infrastructure. The State aid decision notes (para 53) that the UK authorities believed that such an intensity level was necessary “to achieve the step change of more widespread use of these buses.” The 75% limit used in the ZEBRA scheme is based on the previous “green bus” funding schemes such as the All Electric Town or City scheme and the ULEB.

It is also relevant that under the ZEBRA scheme the intensity limit for vehicles is calculated by reference to the cost difference between a zero-emission bus and a standard conventional diesel bus equivalent with the same total passenger capacity. This is important as it is only the difference which will be funded, i.e., the costs that will be incurred to contribute to environmental protection.

The Council, with support from the Operators, had to apply for the ZEBRA Grant by way of a competitive process and one of the criteria used to assess bids was value for money. This indicated that DfT would consider what amount of grant would be proportionate in the particular circumstances (in effect, reviewing the business case) and only award what is considered to be necessary. The application form stated: “Bids which request less funding are likely to be viewed favourably.”

In conclusion, the government has carefully considered the minimum level of grant that must be provided to bus operators to achieve its aims, taking into account what was previously approved for the ULEB scheme, and concluded that 75% is both proportionate and limited to what is necessary.

#### *Provision of Additional Council Grant*

*Bus use in Oxfordshire has recovered more slowly than in other parts of the country from the Covid-19 pandemic, and passenger numbers remain significantly lower than in 2019.*

*Bus operators have confirmed that without further grant from the council in addition to DfT's funding, they would be unable to participate in the ZEBRA scheme. The amount of additional council grant being provided is proportionate and limited to what is necessary to achieve the objective.*

	<p><i>The Council should also obtain and validate the basis on which the operators are saying they would not make the investment - and also what their projections are for the recovery of bus passengers. The risk here is that the intensity will exceed the scheme's limit of 75%. To the extent that any protection would be available from the grant being under a lawful scheme (i.e. ZEBRA), it would be lost as a result</i></p>
<p>The subsidy should be designed to bring about a change of economic behaviour of the beneficiary. That change, in relation to a subsidy, should be—</p> <p>(a) conducive to achieving its specific policy objective, and</p> <p>(b) something that would not happen without the subsidy.</p>	<p><i>The Council has obtained confirmation from the Operators that they would not proceed with the purchases (both vehicles and charging infrastructure) within the intended timescale without the ZEBRA Grant and the additional council grant.</i></p> <p><i>Zero emission buses cost approximately twice as much as a diesel equivalent, not including the costs of charging infrastructure. Whilst ongoing electricity costs are lower than diesel costs, other ongoing costs such as drivers, maintenance, insurance etc are no lower, so zero emission buses are still significantly more expensive over their typical 15-year lifetime than a diesel equivalent.</i></p> <p><i>Without subsidy, bus operators would not buy zero emission buses as there is no commercial business case to do so and therefore the policy objective would not be met without the subsidy.</i></p>
<p>The subsidy should not normally compensate for the costs the beneficiary would have funded in the absence of any subsidy.</p>	<p><i>The council is not aware of any legal obligation on the Bus Operators obliging them to acquire these vehicles and charging infrastructure. In addition, they have both confirmed that they would not fund such costs without the grant funding.</i></p>

<p>The subsidy should be an appropriate policy instrument for achieving its public policy objective and that objective cannot be achieved through other less distortive means.</p>	<p><i>The council is satisfied that Grant funding is the most appropriate and least distortive way of achieving the Council's (and the government's) objective. The confirmations from the Operators strongly indicate that only grant funding would make the project financially viable. This is as a result of various contributing factors, for example, the significant costs of the new vehicles and infrastructure, the fact that they significantly exceed the costs of equivalent diesel buses, the expected shorter lives of the vehicles, unknown full life cycle operational costs and the impact of the pandemic on the market.</i></p> <p><i>It is therefore difficult to see how non-subsidy approaches could be used as it appears that take up would remain low without subsidy.</i></p> <p><i>The government has operated various programmes over the years offering subsidies to bus operators for similar purposes. We would also note that GBER permits aid for similar purposes under Article 36, which suggests that grant funding is generally viewed as an appropriate policy instrument to increase environmental protection.</i></p> <p><i>The Council has ascertained from information published by other local authority ZEBRA funding recipients that 6 other local authorities are providing additional grant funding ranging from 14-27% of total project costs. The Council's contribution is expected to be 7% of total projects costs. This gives support to a grant being an appropriate policy instrument for achieving the public policy objective.</i></p>
<p>The subsidy should be designed to achieve its specific policy objective while minimising any negative effects, including in particular the negative effects on competition or investment within the UK or international trade or investment.</p>	<p><i>The Zebra Scheme is designed to address the failure of the market without the subsidy to meet climate goals etc/ increasing levels of environmental protection.</i></p> <p><i>The need to meet carbon reduction targets, and in turn address climate change, is widely recognised as of paramount importance by most governments and members of the public. The potential long term effects of not doing so are acknowledged by many as an existential challenge that the world must deal with quickly. In this context, the positive contributions of providing the ZEBRA Grant and the additional council grant would outweigh any negative effects on trade or investment, and without this type of financial support from the State the impact on trade and / or investment could be much more serious. The need to reduce pollution caused by diesel vehicles such as buses is very important to the environment and our health generally</i></p>



*The ZEBRA Grant is expected to result in the wider use of buses in the SmartZone area of Oxford on the basis of their green credentials, superior ride comfort and the fact that the new buses are expected to be of a higher quality generally as well as meeting enhanced accessibility standards. Some of the additional users will be those who previously used private vehicles;*

*All new buses should come into force no later than 12 months from their order date and in any event no later than two years after the award of funding from the DfT to the Council. In addition, bus operators must commit to investing in the new buses and operating them in the defined area for a minimum of five years. Taken as a whole, these requirements should ensure that the intended positive benefits are achieved.*

*Another positive contribution is that both bus operators have committed to using green energy to power buses, something that further supports environmental protection and was taken into account by the DfT when considering the business cases submitted by local authorities.*

*The DfT selection of grant recipients used a transparent and competitive process with bids assessed against objective and published criteria. This will reduce the extent to which the ZEBRA Grant could have any material effect on investment, a point acknowledged by the European Commission in the ULEB approval (see paragraphs 77 – 79 of the approval);*

*Although the Council has not run a tender under the public procurement rules to select the grant recipients, the Operators are the only ones operating wholly within the Oxford Smart-Zone. As the intention is to provide grant funding to both, any risk of challenge from the other should be minimal.*

*Operators will be obliged to run competitive tenders and establish value for money in respect of the purchase of the buses and charging equipment in order to minimise any impact on trade or investment at the level of vehicle and equipment suppliers.*