



Department  
for Transport

# Zero Emission Bus Regional Areas Scheme – 2021 to 2022 Application Form

## Call for Expressions of Interest

### Applicant Information

**Local transport authority: West Sussex County Council and Surrey County Council**

**(For joint bids only) Which local transport authority is the lead bidder: West Sussex County Council**

**Area within authority covered by bid: Gatwick, Crawley and Horsham, plus Horley, Redhill and Reigate in our partnering authorities area**

**Bid Manager Name and position: Bill Leath**

**Contact telephone number: 0330 222 5438**

**Email address: [bill.leath@westsussex.gov.uk](mailto:bill.leath@westsussex.gov.uk)**

**Postal address: County Hall, West Street, Chichester PO19 1RH**

### Submission of proposals:

Applications to the Scheme will be assessed against the criteria set out here and in the guidance document. Please adhere to word limits. We will not accept any additional information unless specifically requested.

Proposals must be received no later than 17:00 on the following days.

- **Fast track process** - 5pm on 21<sup>st</sup> May 2021
- **Standard process** – 5pm on 25<sup>th</sup> June 2021.

You will receive confirmation that we have received your proposal within 1 working day.

An electronic copy only of the bid including any supporting material should be submitted to [buses@dft.gov.uk](mailto:buses@dft.gov.uk).

Please include “**ZEBRA (Fast track Process) Local Transport Authority name**” in the subject line of the email if you are applying under the fast track process.

Please include “**ZEBRA (Standard Process) Local Transport Authority name**” in the subject line of the email if you are applying under the standard process.

Enquiries about the Fund may be directed to [buses@dft.gov.uk](mailto:buses@dft.gov.uk).

## **Transparency and privacy**

Please refer to the guidance for this scheme before completing the application form to understand how DfT will manage your data.

## SECTION A: Mandatory Questions

Areas must satisfactorily answer all of the questions in this section to be eligible to progress to Phase 2 of the scheme. If you would like further information, please contact the Department for Transport at [buses@dft.gov.uk](mailto:buses@dft.gov.uk).

Areas must provide the information requested in questions A1-A5.

### A1. In total, how many new zero emission buses will your proposal deliver?

54 buses (on top of 20 buses already funded in the same area)

### A2. Total DfT funding sought (£m)

*While there is no minimum or maximum size for bids the department is interested in supporting at least three areas across the ZEBRA scheme as a whole, so we expect to see schemes that are approximately £25m – £35m. This is designed to encourage a wide range of bidding areas to come forward and to ensure DfT are able to fund at least three areas across the whole scheme.*

£9,140,000

### A3. Third party funding contributions (£m)

£16,251,000 Surrey County Council Contribution  
£4,700,000 Metrobus (Brighton & Hove Buses)

### A4. Funding from other government schemes (£m)

*Please set out any funding from other government schemes that is intended to be used alongside funding from the ZEBRA scheme.*

£Nil

### A5. Total cost of the proposal (£m):

*This should include DfT funding as specified in A2, any third party contributions as specified in A3 and any funding from other government schemes as specified in A4.*

£30,091,000 (£27,591,000 to be spent on new buses and £2,500,000 to be spent on scaling up hydrogen refuelling infrastructure from the existing 20 bus Fastway)

project to provide refuelling capacity for the additional 54 buses in this bid and some spare capacity for additional vehicles)

Areas must be able to answer yes to question A6-A12 to be able to progress to Phase 2.

**A6. If your bid is successful, are you able to invest DfT funding within the time outlined by your scheme?**

**Yes**

**A7. If your bid is successful, are you able to capitalise DfT grant funding?**

**Yes**

**A8. Have you considered whether additional zero emission buses are needed to replace existing buses?**

*Evidence suggests that replacing diesel buses with zero emission buses can require additional zero emission buses to provide the same level service as provided by diesel buses. Areas should set out how many additional zero emission buses are needed to replace existing buses. If areas are of the view that additional zero emission buses are not required please set out why.*

**Yes**

**Our project involves replacing older diesel buses with new hydrogen fuel cell electric buses which unlike battery electric buses, are more than capable of doing the same level of work as the diesel buses they replace so no additional buses will be required.**

**A9. Have you provided a breakdown of infrastructure costs for your proposal?**

*Infrastructure costs could include (but are not limited to): cost of charging unit or refuelling stations electrical or other power components; civil engineering works, labour costs (for installation); hardware costs; capital costs of developing associated software systems; surveys at the point of procuring the infrastructure provided they can be capitalised; upgrades to the energy grid to cater for increased energy demand.*

**The £2.5m identified in this ZEBRA bid is purely directed towards scaling the original refuelling solution to make it fit for an additional 54 buses.**

**A10. Does your proposal have the support of bus operator(s) in the area?**

*The proposal requires the support of at least one bus operator operating in the area who will operate the zero emission buses. The bid does not, however, need the support of all*

*bus operators operating in the area. If local transport authorities are not able to provide this evidence of support from operators they **must** explain why.*

**Yes, Metrobus are keen to support this application as a step change to the Crawley based operations building on the award winning Fastway BRT services in the town and into South Surrey serving local economic centres**

#### **A11. Have you spoken with any energy companies when preparing your proposal?**

*Energy companies could include Distribution Network Operators, Independent Distribution Network Operators, energy supplier, energy storage companies, smart charging providers or hydrogen fuel providers.*

**Ryse Hydrogen are the existing refuelling infrastructure and fuel supplier and their solution was always designed to be able to scale as funding became available to increase the number of zero emission buses at the Crawley Depot.**

#### **A12. Does your proposal comply with the accessibility requirements set out in the scheme guidance?**

*The scheme guidance sets out a number of accessibility requirements including: requiring buses to incorporate equipment to identify the route, each upcoming stop, and the beginning and end of diversions: providing an induction loop to aid direct communication between drivers and passengers who use a hearing aid and providing an additional flexible space in addition to the mandatory wheelchair space, suitable for a second wheelchair user and/or at least two unfolded pushchairs or prams.*

**Yes, Metrobus (and sister brand Brighton & Hove Buses) are currently the only bus operator listed as an ‘Inclusive Leader’ by the Department for Transport and agree to ensure that these buses are all fully compliant with the accessibility requirements set out in the scheme guidance. Currently their entire 400 strong regional bus fleet already features ‘talking buses’ audio/visual next stop announcements and an increasing number of buses also feature hearing loops.**

## SECTION B. Defining the place

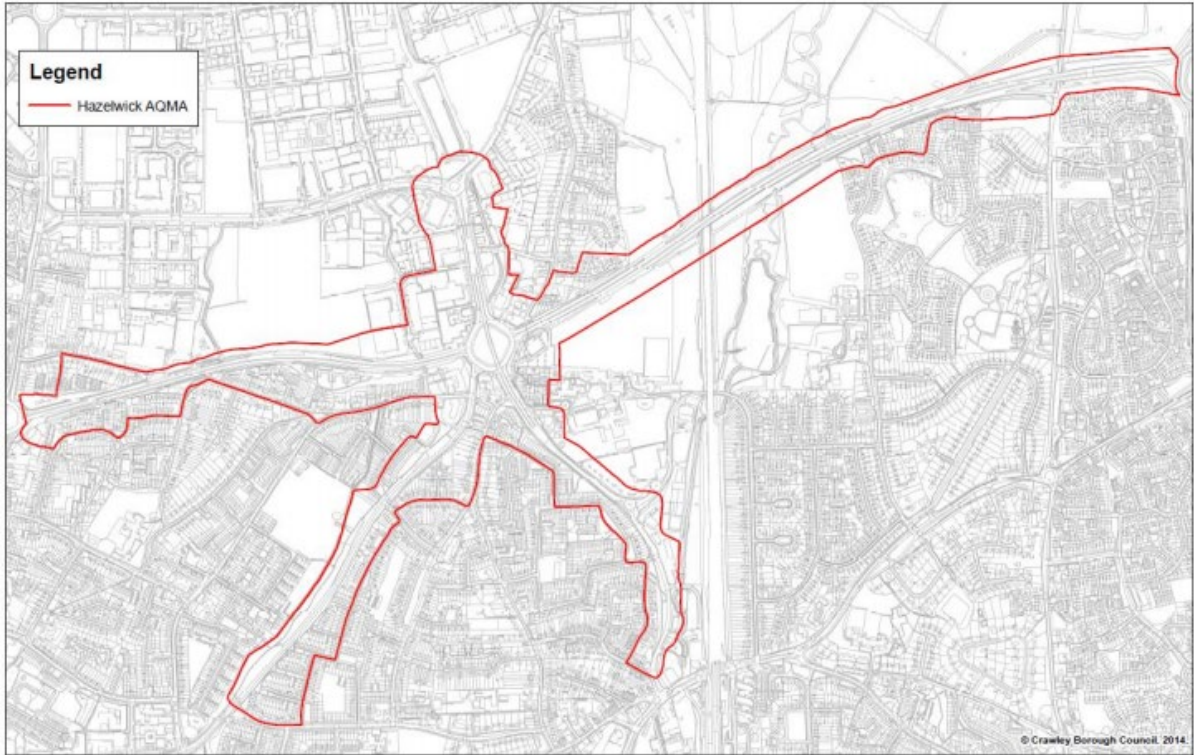
This section will seek a definition of the area to be covered by the Zero Emission Bus Regional Area. Areas should:

- Include information setting out the extent of the area to be covered by the proposal – the **defined area**. If the defined area is different to the area covered by the local transport authority please make this clear. Please provide maps if required.
- Provide details on the bus sector including naming **all** operators who operate services in the defined area, their market share and fleet sizes. This should include both operators who are supporting your proposal and will be operating the zero emission buses and other bus operators in the defined b area.
- Clarify what proportion of bus services in the defined area will be operated using zero emission buses.

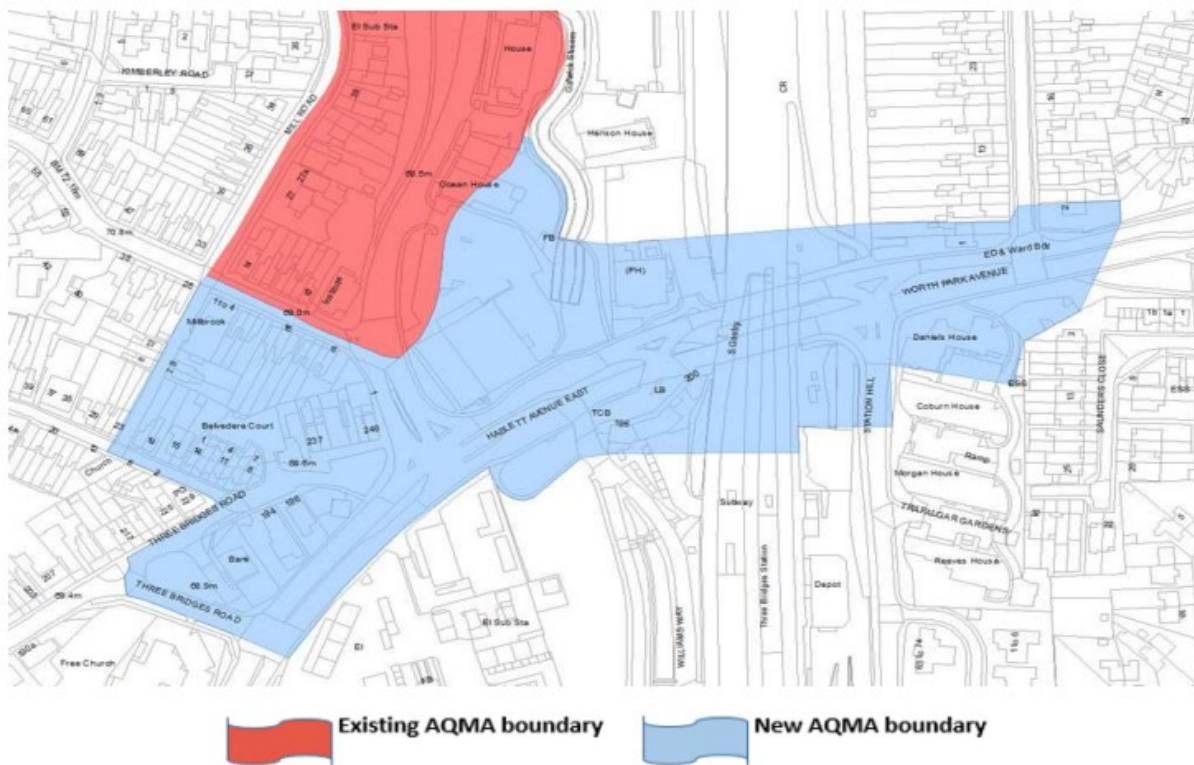
*Please limit your response to 500 words. Please provide maps as annex documents if required.*

**Five AQMA's would benefit from the deployment of these additional buses, four of them within Surrey at Horley, the A23 and in Redhill and Reigate and one of them within Crawley at Hazelwick which is proposed to be extended to cover the Three Bridges area. All of these buses are based at the Metrobus depot in Crawley and their deployment will mean that the buses will be able to be deployed on a number of routes that serve Crawley and go on to serve the majority of services operated into South Surrey from Crawley.**

**Crawley Borough Council Proposed Changes to Crawley's Air Quality Management Area (AQMA)  
maps extract 2021  
Existing AQMA**

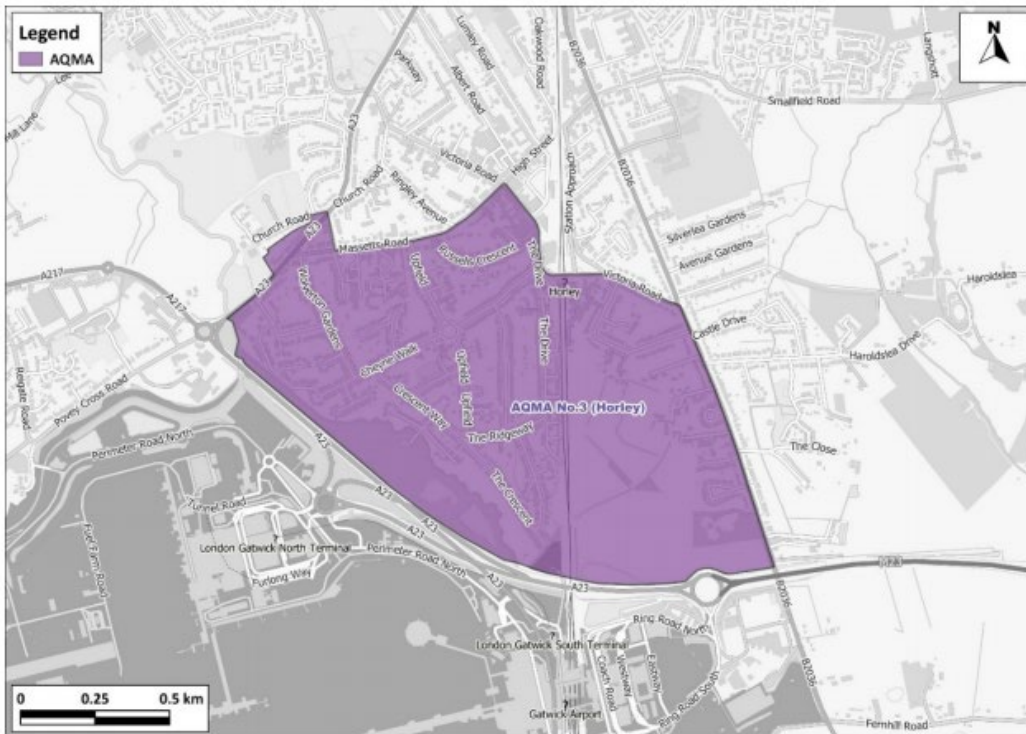


**Proposed extension to AQMA**



Reigate and Banstead Borough Council – LAQM Annual Status Report 2020 map extract





**Figure 2.2.2: AQMA No.3 (Horley)**

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**Reigate and Banstead Borough Council – LAQM Annual Status Report 2020 map extract**





**WSCC has plans to improve the Hazlewick roundabout including the addition of bus priority measures (bus lane). This, along with zero emission buses using this route will not only directly reduce emissions, but with joint promotional campaigns increase patronage away from cars further improving local air quality.**

**Additionally, Gatwick Airport is a key destination for most of these services and, whilst the aviation sector has been severely impacted by the Covid 19 pandemic, there is a strong correlation with the levelling up agenda and build back greener Government priorities. All Metrobus services which go on campus at Gatwick Airport would become zero emission and all but one route out of the 675 daily bus departures from Gatwick South Terminal (accessed via a bus interchange on the A23) would become zero emission as well.**

**See attached maps**

## **SECTION C: Ambition**

This section will seek evidence of the level of ambition from the local transport authority to decarbonise their bus fleets, support bus services and decarbonise transport.

### **C1. Public transport ambitions**

Areas should:

- Provide clear explanation of your ambition to decarbonise the bus fleet in the defined area and how this proposal will support this ambition. If the defined area is different to the local transport authority area please explain your ambitions to decarbonise the bus fleet in your local transport authority area and how this proposal will support this ambition.
- Provide evidence of existing plans to support the provision and operation of local bus services in the area. This could include existing partnership working between the local transport authority and bus operators, bus priority measures, improvements to information about bus services.
- Include complementary policies to decarbonise transport in the area.
- Explain how the proposal supports wider ambitions to increase public transport use and active travel in the area.

*Please limit your response to 500 words.*

**Our local operator Metrobus who provide the majority of bus services in and around the Crawley and South Surrey areas, have been at the forefront of activity in the UK industry in terms of planning to operate a zero emission bus fleet. They have already successfully attracted funding that will enable their first 20 Fastway buses to switch to zero emission hydrogen fuel cell operation, with a resulting cascade, enabling the retirement of the majority of their Euro 3 and 4 diesel buses. A further 54 zero emission buses as outlined in this bid would take the proportion of zero emission buses up to half of the local fleet and leave the vast majority of the remaining fleet as ultra low emission Euro 6 diesel. From the first commercially led application of hydrogen fuel cell buses in the UK, through to the largest deployment**

of the type in Europe, a successful ZEBRA bid for 54 buses would act as a showcase for demonstrating that even the most operationally demanding and heavily used services can be operated by zero emission buses.

In addition, conventional electric bus deployments continue to represent considerable challenges. They cannot match the operational performance of legacy diesel buses and require massive electricity grid infrastructure upgrades to deliver sufficient power for charging. Hydrogen fuel cell electric vehicles can operationally match diesel 'bus for bus' in the most demanding of operating environments. They ensure that the scale of people travelling represented by buses, acts as a powerful enabling force for much wider decarbonisation of other local road transport at affordable prices.

West Sussex and Surrey County Councils also have a strong record of partnership working that supports wider ambitions to increase public transport use and active travel in the area. The Fastway BRT scheme which is approaching two decades of service has seen the authorities working with Metrobus to speed up bus journey times through a combination of guided busways and bus lanes which has doubled bus patronage already. Both authorities are committed to continuing to deliver more priority measures in the future throughout both counties and are collaborating on Bus Service Improvement Plans. Additionally, Gatwick Airport also provided further incentives for staff and passengers of the airport to travel sustainably by introducing a new charge for access to their 'kiss and fly' drop bays.

## **C2. Community benefits**

Please highlight any community benefits from your proposal. This could include economic development in the area or the creation and/or retention of jobs and apprenticeships related to the maintenance of zero emission vehicles, including batteries and fuel cells, and supporting infrastructure.

*Please limit your response to 500 words.*

The local economy in the Crawley/Gatwick area has been one of the hardest hit by the pandemic in the UK, bearing the brunt of the Covid crisis with its heavy dependence on the aviation sector. This has also impact employment and business in the south of Surrey. As business and education sectors seek to bounce back by creating a more diverse economy that is less reliant on aviation, building greater scale into the zero emission public transport system will enable a greener levelling up which builds on much of the recent investments in infrastructure from the Crawley Growth Programme and Crawley Town Fund projects. This already includes new real time information provision across the town, enhanced public realm throughout the town centre, a new railway station in Crawley, enhanced bus priority in Manor Royal business district and improved passenger waiting facilities with a new Crawley Bus Station and Superhub mini departure lounges at Manor Royal.

## **C3. Support for your proposal and wider vision**

Provide evidence of support for your proposal and wider vision, such as letters of support or evidence of engagement, from partners.

This **must** include evidence of support from the bus operator(s) who will operate the zero emission buses. You **do not** need to include evidence of support from all bus operators within the area, only the operator(s) who will be operating the zero emission buses. This evidence must be a signed letter by both the CEO/equivalent level of the company and the local MD, committing to investing in the buses and operating them in the defined area e for a minimum of 5 years.

Local transport authorities that have not included this evidence must clearly set out the reasons for this.

You **must** also include evidence of engagement with an energy company. Energy companies could include Distribution Network Operators, Independent Distribution Network Operators, energy supplier, energy storage companies, smart charging providers or hydrogen fuel providers.

Areas may also wish to include evidence of support from other relevant bodies, depending on the proposal, for example:

- Other tiers of local government
- Local Enterprise Partnerships
- Local Energy Hub
- Leasing companies
- Finance companies

*Please limit your response to 1000 words. Evidence of support, such as letter of support, can be included as annex.*

**Please find embedded appended letters of support from WSCC, SCC, Go Ahead/Metrobus, Gatwick Airports Ltd, Crawley Borough Council.**

**Metrobus Head of Innovation Strategy, Patrick Warner is also chairing the Green Transformation sub group of the Crawley Town Fund project board which demonstrates how close the bus company is already working with local stakeholders.**

**Metrobus have engaged with Ryse Hydrogen who are supplying the infrastructure in Crawley that would, should this bid be successful, lead to 50% of all the Metrobus buses operating out of their depot that covers the town, Horsham, Mid Sussex and South Surrey, being zero emission. WSCC and SCC see this as a scalable approach to be built upon as the area recovers from the pandemic.**

**A successful bid would continue the work from the Crawley Growth Deal in which Gatwick Airport Ltd, WSCC, Crawley Borough Council, Coast to Capital LEP and Manor Royal Industrial Park, supported by HMG, have jointly developed business enterprise opportunities in the town. WSCC, through the Crawley Growth Programme has worked with partners to improve infrastructure in the town that can be enhanced through the accelerated provision of ZEBs. This includes delivery of new bus station, improved rail forecourts for bus/rail interchange, bus super hubs/shelters and RTPI all enhancing bus as a primary mode of travel.**

**SCC - Redhill & Reigate Bus Priority Study. Bus lane/priority schemes being progressed through outline design, consultation, detailed design and delivery within the next 18 months including bus lanes on A23. SCC's ambition is to deliver improved traffic management and introduce bus priority measures to support reduced journey times and better bus service reliability.**

**Provision of ZEBs highlights an intent by WSCC, SCC and partners to work together through newly formed Enhanced Partnerships to deliver Bus Service Improvement Plans to continue to forge ahead with making buses a primary mode of choice for residents and visitors helping to support the local economies with key business attraction and connectivity with rail and aviation. In addition, success would accelerate delivery of a zero emission town in the south of England.**

## **SECTION D: Air Quality**

This section will seek evidence of the air quality challenges in the area and how your plans tackle air quality in the area. Areas should:

- Set out the air quality challenge in the area, such as whether the area is identified in the national assessment as exceeding statutory limits.
- Set out how the proposal would address the local air problem.
- Provide evidence of existing transport plans to tackle air quality and greenhouse gas emissions.

*Please limit your response to 500 words.*

**We will not accept bids covering places that cannot show that they have air quality issues.**

**The first phase of planned hydrogen bus deployments by Metrobus, already removes diesel buses from the centre of the worst affected roads covered by the AQMA in Crawley and the further planned deployments in partnership with Surrey County Council and in this ZEBRA bid will also remove further diesel buses from the southern area of the Crawley AQMA and in some of the worst areas in South Surrey.**

**Through all three planned deployments (including ZEBRA), half of the buses operated from Crawley Depot would become zero emission including routes 2, 4, 5, 10, 20, 100, 200, 420, 430, 435, 460 and 480.**

**Air Quality Action Plans for Crawley and Reigate and Banstead highlight a range of bus measures, including hydrogen fuel cell buses, bus priority measures, interchange and waiting facility improvements to address air quality issues.**

## SECTION E: Value for Money

This section will seek evidence how you meet the Value for Money criteria, as set out in the guidance. Areas are also required to submit a separate value for money proforma that has been published alongside the application form. This spreadsheet requests basic information about the proposed investment to enable the value for money to be assessed using the Department's "**Greener bus model**".

The information in a completed pro forma, enables the model to estimate the greenhouse gases (GHG) emissions savings, other environmental & social impacts such as reduction in particulate matter (PM) and nitrogen oxide (NoX) emissions and savings & costs in the public and private sectors. By quantifying the key impacts of a proposed investment, this model helps provide decision-makers with as full a view as possible, about impacts on the environment, society, transport operators and the government finances.

The model provides a measure of the 'Value for Money', in the form of a benefit cost ratio (BCR) alongside other metrics such as the total estimated GHG savings and a cost effectiveness indicator estimating the net cost per tonne of carbon saved. These outputs will be used to score bids based on value for money.

The model does not capture every possible impact from a proposed investment, such as impacts from any resulting increases in patronage, improvement to the quality of journeys, or increased reliability. Where wider impacts (positive or negative) from investment are expected these should be stated, in the pro forma, as non-monetised impacts. These will be considered when making a value for money judgement, as set out in the Department value for money framework.

**The partners believe that the additional 54 ZEBs on top of the 20 already ordered will present a clear message to the residents, businesses and visitors to the area that buses offer a viable alternative to car travel. Opportunities through suitable branding and joint promotion is expected to see increased patronage both in recovery and as the local economy flourishes. It also presents greater opportunity for more incoming and inward investment in the area.**

**74 ZEBs also add value by improving health and well-being of residents and visitors to the area making it a better place to live, work, learn and access leisure activities.**

**Finally, the investment will enhance the reputation of all of the partners and the Government showing support for the local economy and create a catalyst to building back greener, which is core to the partnership's emerging area based response to the new National Bus Strategy.**

## SECTION F: Deliverability

This section will seek evidence of how the Zero Emission Bus Regional Area will be delivered, and demonstrate that plans are credible and deliverable.



## F1. Method of delivery and timescale for implementation

Establish the method of delivery, to cover:

- How you will work with local bus operators and other partners to deliver the proposal
- Any public consultation or third-party permission that will be required (e.g. for infrastructure)
- Explain any mitigations put in place for SMEs.
- Timescales for implementation, including when orders will be placed for zero emission buses and when supporting infrastructure will be delivered.
- Please demonstrate how your plans are credible and deliverable in the time proposed, and that any risks have been understood and mitigated

*Please limit your response to 1,000 words.*

**WSCC and SCC will work with Metrobus at pace to build scale by increasing the size of their existing planned deployments so third party permissions are limited to a variation in the planning application to show a slight amendment and expansion of the planned hydrogen refuelling infrastructure. This is not expected to be challenging as the operator has already been clear in terms of their ambition to operate a fully zero emission fleet by 2030/2035 and has been actively planning for the infrastructure to be scalable.**

**Whilst there are no SME operators planned to be part of this project, it is perfectly possible that other operators of buses and those with commercial fleets, could gain a cheaper entry into the zero emission market with hydrogen by sharing the infrastructure being put in by Metrobus, building scale faster than is possible with buses alone and reducing the cost of the fuel for all in the process.**

**The existing planned deployments of buses should be on the road by late Summer/Autumn 2022 and a successful ZEBRA funded expansion of this could follow immediately afterwards, subject to production bus manufacturing capacity which currently has a 6-7 months lead time.**

## F2. Monitoring and evaluation

Please provide indicative details of how monitoring and evaluation will be used to ensure learning about the project and inform future schemes. A detailed monitoring and evaluation plan is not required at this stage but should explain how the approach to delivering services will ensure that future learning is maximised.

*Please limit your response to 500 words.*

**The scale of the deployment of hydrogen fuel cell buses with Metrobus is such that there will be considerable interest from within the bus industry, not just throughout the UK but across Europe. Metrobus have already been participating in the EU FCH JU Jive project so have been participating in regular knowledge and best practice sharing sessions as part of that process. Becoming a UK leader in the application of this technology will ensure that this will continue and intensify and Metrobus are committed to continuing to share their knowledge to help build more scale. This**

sort of collaboration across vehicle sectors is not just essential to meet Government climate change ambitions but is also crucial in continuing to reduce the costs involved with operating the vehicles.

The partners will work together, through ZEBRA but also the development of BSIPs that will include full and robust baseline data across the area as well as regular monitoring of the impacts of the introduction of both the vehicles, the fuelling infrastructure and the delivery of bus services across Crawley/Gatwick and South Surrey. A monitoring and evaluation plan will be developed in liaison with the DfT to ensure all parties benefit from the data and feedback. This will feed into the monitoring/evaluation of the BSIPs in the areas concerned to ensure a joined-up approach is adopted. This will ensure future investment is made wisely.

### **F3. Procurement, State Aid and subsidy rules**

Please confirm you have received advice on legal requirements in relation to procurement, subsidy control and state aid.

Please also demonstrate how you will abide by legal requirements in relation to procurement, subsidy control and state aid, including an explanation, together with supporting evidence, of how you will comply with the principles under the UK-EU Trade and Cooperation Agreement.

*Please limit your response to 500 words.*

The UK-EU Trade & Cooperation Agreement (“TCA”) was agreed on 24<sup>th</sup> December 2020 between the UK and EU and took effect from 1<sup>st</sup> January 2021.

This provides an interim replacement to the old State Aid regime, namely the Subsidy Control Regulations.

West Sussex County Council (“WSCC”) are issuing an Expression of Interest (“EOI”) to obtain ZEBRA funding (“Zero Emission Bus Regional Areas Scheme 2021-2022), working with Surrey County Council (“SCC”) and Metrobus. The specific area of interest is the Crawley/South Surrey area.

#### **Is there a subsidy?**

To be a subsidy, the following four factors need to be present:

- i. Financial contribution using public resources which confers a benefit on the recipient;
- ii. Benefit is conferred on persons supplying services or goods in the course of a business which is NOT available under commercial terms;
- iii. Subsidy is specific to a particular enterprise(s) in a particular industry or sector; and
- iv. The subsidy has, or could have, a harmful or distortive effect on trade or investment between the UK and the EU.

The ZEBRA scheme is a “place-based” scheme that will allow areas, led by LOCAL transport authorities, working in close partnership with bus operators or consortia with more stakeholder, to bid for funding to purchase zero emission buses and the infrastructure to support them. Arguably, this would not amount to a subsidy as factor iv. Above would not apply. If this is a scheme to promote local areas to increase zero emission vehicle capacity, the purpose of the funding could not have a harmful or distortive effect on trade or investment between the UK and the EU as EU authorities and bus companies would not be eligible to apply for the funding.

### **Subsidies of Public Economic Interest**

Even if a subsidy is deemed to exist, this ZEBRA scheme is likely to fall under a Subsidy of Public Economic Interest (“SPEI”) as SPEIs, under the TCA, cover subsidies for transport (airports, road and ports). As long as the funding is over £795,000 (which this is) and the funding application and project respects the six principles of the TCA, there is a low/minimal risk of a challenge being made. The six principles are as follows and I consider this project would satisfy and respect each (as further detailed in the body of the DWF Subsidy Assessment Form):-

1. Specific public policy objective to remedy an identified market failure or to address an equity rationale such as social difficulties or distributional concerns (“the objective”);
2. Proportionate and limited to what is necessary to achieve objective;
3. Brings about a change of economic behaviour of beneficiary that is conducive to achieving the objective and would not be achieved in absence of subsidies being provided;
4. Is not a compensation for costs the beneficiary would have incurred if subsidy not provided;
5. Appropriate policy instrument to achieve a public policy objective and that objective cannot be achieved through less distortive means; and
6. Positive contribution of subsidy to achieving objective outweigh any negative effects particularly the negative effects on trade or investment between the parties.

**ASSESSMENT BY SUZANNE LEWIS, SENIOR SOLICITOR AND TEAM LEADER OF THE CONTRACTS AND PROCUREMENT LEGAL TEAM, WSCC**