

	2.3 tonnes per person annually. It is predicted that under a business-as-usual scenario there would be no reduction in emissions but an approximate 1% growth by 2050.
Legal basis for award	The subsidy pursues a specific public policy objective to remedy an identified market failure.
Duration of subsidy and any time limits attached to the award	The operational life of the Hydrogen Buses is expected to be 15 years.

Subsidy Control Assessment Form

UK-EU Trade and Cooperation Agreement ("TCA") Principles

Subsidy Control

		<p>to our public transport infrastructure.</p> <p>National Bus Strategy This subsidy also fulfills objectives in the National Bus Strategy to accelerate the implementation of zero emission buses across the UK and build back better following COVID19.</p> <p>Bus operators across the Country share Governments ambitions to achieve zero emission bus fleets. This however is only possible currently if there is public subsidy to mitigate for the substantial cost premium.</p>
2	<p>The subsidy is proportionate and limited to what is necessary to achieve the objective.</p>	<p>The subsidy required will be limited to that necessary for achieving the specific objective as defined above. As stated above the subsidy requirement will be limited to what is required to accelerate the introduction of 34 zero emission buses and not more. Metrobus will be no better or no worse off in operating HFC buses compared to the current diesel buses operating on these services.</p> <p>Although there will be no diesel costs associated with operating hydrogen buses Metrobus will have the cost of purchasing hydrogen, therefore there is no financial saving to Metrobus from operating Hydrogen over diesel buses.</p> <p>Passenger revenues will not increase as a result of operating zero emission buses so have not been taken into account.</p> <p>As Metrobus do not lease any vehicles it was not felt appropriate to consider the difference between the commercial and non-commercial leasing costs for buses as this is not a like for like comparison of how the operator currently works.</p> <p>The leasing costs will be calculated on the method which is most consistent with the Metrobus normal procurement ; the total operating costs of diesel buses compared to the higher maintenance and operational costs experienced with operating Hydrogen Fuel Cell buses, taking into account annual depreciation on Euro 6 diesel buses (based over 15 years). This is in line with the costs associated if Metrobus were to purchase their own new Euro 6 diesel buses. However, it must be acknowledged there is currently not a business case for Metrobus to procure new Euro 6 Diesel or Hydrogen Fuel Cell buses for these Surrey routes, as the commerciality of these routes, particularly in the current COVID climate, would not support such an investment.</p> <p>This subsidy is calculated as follows: The cost of buying 34 Euro 6 Diesel buses compared to the cost of buying 34 Hydrogen Fuel Cell buses minus the higher maintenance and operational costs for Hydrogen buses.</p> <p>Euro 6 Diesel bus costs: £171,000 single deck (x23) £230,000 double deck (x11)</p> <p>Hydrogen Fuel Cell bus costs: ACTUAL COSTS £459,760 single deck (x23) £537,253 double deck (x11)</p>

£ 16,484,263 34 x Hydrogen Buses
£ - 6,463,000 34 x Diesel Euro 6 Buses
 £ 10,021,263 Difference in cost of buses
£ +5,513,950 Higher operational/maintenance costs funded
 by the operator
£ 15,535,213 Viability Gap
£ - 949,050 15-year lease costs (£63,270 p a)
£ 14,586,163 Total Subsidy

See part 2 for bench marking undertaken by Metrobus

The lease agreement with Metrobus will also include a process for the vehicle sale or disposal/recycle of these 34 hydrogen buses, inclusive of the return of any and all capital receipts to Surrey County Council.

Metrobus Euro 6 vehicles will be cascaded onto other routes in Surrey, and we have explored the opportunity for the proceeds from the net worth of these older vehicles to be used as a contribution towards the cost of the hydrogen buses. The analysis shows:

10 x Scania Omnicity single deckers, 14 years old. Nil book value but likely value of £1,000 each = Total profit of £5,000
 3 x Enviro 200 single deckers. 15 years old. Book value around £3,500 each but likely value of £2,500 each = Total loss of £3,000
 6 x Enviro 200 single deckers. 10 years old. Book value around £11,700 each but likely value of £6,000 each = Total loss of £34,200
 1 x Scania Omnidekka. 16 years old. Nil book value but likely value of £1,000 = Total profit of £2,500
 14 x Scania Omnicity double decker. 14 years old. Book value around £14,000 each likely value of £7,000 each
 = Total loss of £98,000

This highlights there will not be proceeds to be available to contribute towards hydrogen buses. Metrobus may mitigate some of the losses through transfer to other Go-Ahead companies but they still expect a loss overall.

By agreeing this subsidy in respect of 34 HFC buses, the result will be a total of 54 HFC buses in operation on Metrobus routes by Autumn 2022. This will demonstrate our level of commitment to reaching net zero carbon and plays a critical role in positively influencing behaviors to bring about significant improvements in our air quality and the health of our residents.

COVID19 Challenges

The high upfront capital costs of vehicles, energy infrastructure and higher maintenance costs act as a barrier to the rapid adoption of new zero emission buses. In the current unprecedented time, the bus industry is still working to recover from the devastating effects of COVID19. Currently an average of 68% of pre COVID passenger journeys are being made on the Metrobus route network in Surrey. The operator does not have sufficient funding available to purchase these vehicles with the current COVID challenges, depressed passenger numbers and commercial viability of some of the routes. The County Council needs

action now to meet our Climate change objectives and waiting is not an option

	<p>-It is predicted that under a business-as-usual scenario there would be no reduction in emissions but an approximate 1% growth by 2050.</p> <p>-We will be unable to contribute effectively towards Our strategic priorities, providing sustainable transport options to residents in Surrey.</p> <p>-SCC will not satisfy part of our duty as a local authority to improve air quality, especially in AQMAs, for transport provision and will not be able to contribute effectively towards our strategic priorities of providing more sustainable and cleaner transport options for residents.</p>
<p>Option B</p>	<p>Deliver only part of the project or extend the programme timeframe</p> <p>PROS</p> <p>-Some of the HFC buses and other supporting measures could be delivered in a reduced number of locations (with appropriate Cabinet / Cabinet Member prioritisation).</p> <p>-This would reduce emissions and improve user experience in those areas alone.</p> <p>-The unallocated pipeline funding could be deployed elsewhere or the capital borrowing not taken up and / or the programme could be elongated and delivered over a much longer timeframe.</p> <p>CONS</p> <p>-Funding has already been earmarked and there is strong political support for these initiatives.</p> <p>-SCC will not satisfy part of our duty as a local authority to improve air quality, especially in AQMAs, for transport provision and will not be able to contribute effectively towards our strategic priorities of providing more sustainable and cleaner transport options for residents.</p> <p>-Some pipeline funding would not be spent and would have to be reallocated, against the council decision already made.</p> <p>-Extending the programme timeframe would delay the reduction in emissions and miss the 2030 target.</p>

PROS

-Delivery of all the positive outcomes and benefits as

It is also clear from the above that Metrobus would not be able to commence the project by entering into legally binding agreements to acquire the new buses and equipment/dispose of the existing busses, until the Council's subsidy is granted to Metrobus. As required in the parallel State aid regime operated in the EU, the subsidy provides the necessary incentive for the project to occur, without which it would fail.

	As a consequence, the subsidy is the only policy instrument available to make this project occur now and no other less distortive financing is available to achieve the objective.
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6.

positive contributions to achieving the objective outweigh any negative effects, in particular the material effect on trade or investment between the

		with the County Council to discuss partnership working.
Article 3.5 (Prohibited subsidies and subsidies subject to conditions) has been considered.		The prohibited awards at Article 3.5 of the TCA have been checked: Yes No

Other Subsidy Control Considerations

Legal Commitment	Appreciable Risk
Article 10 Northern Ireland Protocol and Article 138 of the Withdrawal Agreement	Yes No
Article 138 of the Withdrawal Agreement	Yes No
The WTO Agreements	Yes No
Subsidy provisions Trade Agreements the UK has entered into at the date of the award.	Yes No