Department for Transport

CLEAN BUS TECHNOLOGY FUND APPLICATION FORM

For Local Authorities in England

June 2013

Department for Transport

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Department for Transport
Great Minster House
33 Horseferry Road
London SW1P 4DR
Telephone 0300 330 3000
Website www.dft.gov.uk

Guidance for applicants is available at: https://www.gov.uk/government/organisations/department-for-transport/series/clean-bus-technology-fund. **Applications should be emailed to** CBTF@dft.gsi.gov.uk **by 17:00, Friday 19 July 2013.**

If you need further assistance with the application process, contact the DfT Air Quality Strategy Team via email: CBTF@dft.gsi.gov.uk**.**

Department for Transport

Application Form for Clean Bus Technology Fund

The Department for Transport (DfT) is inviting local authorities in England[1] to apply for Clean Bus Technology grants of a maximum of £1,000,000[2] towards reducing oxides of nitrogen (NOx) emissions from local buses. The total fund available for this scheme is £5m.

Applicants should use this form to submit their proposals to DfT by 17:00, Friday 19 July 2013. Guidance notes have been published alongside this application form. These provide useful advice on how to develop and write a successful proposal and should be referred to when filling in this application form.

All applicants must confirm that they have secured commitment from at least one local bus operator to engage in the proposed project. Please check the box below to show that you have completed this requirement and provide the name of the bus operator(s).

I have secured commitment from at least one local bus operator: Yes

Name of local bus operator(s): Phoenix Taxis (North East) Ltd, South Albion Retail Park, Blyth, NE24 5BW. http://www.phoenixtaxis.net/home.html

In addition, all applicants must confirm that they have received legal advice on EU state aid rules and that any financial restrictions with respect to the state funding the upgrade of local buses will be met. Please check the box below to show that you have completed this requirement.

I confirm that I have received legal advice on EU state aid rules which will allow the proposed project to proceed if successful: Yes - Given the low level of the bid, Nexus does not consider that there will be any distortion of competition, and the level falls within the 'de minimis' exception.

This page has been completed by the Senior Responsible Owner (SRO) of the proposed project[3]: Yes

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[1] *London boroughs are excluded from this scheme as DfT is currently part funding the modification of 900 London buses to reduce NOx emissions.*
[2] *Local authorities can only bid once for a Clean Bus Technology grant of up to £1,000,000.*
[3] *Provide SRO name and contact details in* Section A.

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Please refer to the attached guidance before completing this form.

Section A. Applicant Information

A1. Local authority name(s). If the bid is a joint proposal, please enter the names of all participating authorities and specify the lead authority: Nexus

Senior Responsible Owner name and position:

Helen Mathews, Head of Business Development, Nexus

Bid Manager name and position (first point of contact):

Stephen Psallidas, Business Development Officer, Nexus

Contact telephone number: 0191 2033413

Email address: stephen.psallidas@nexus.org.uk

Postal address: Nexus House, St James' Boulevard, Newcastle NE1 4AX

Website address for published bid (if applicable): www.twita.gov.uk

A2. Please indicate if you are planning to outsource the project management either wholly or partially (if known at this stage):

Yes: ☐ Complete the form below.
No: X Go to Section B.

Name of organisation:

Project manager (first point of contact):

Contact telephone number:

Email address:

Postal address:

Website address for published bid (if applicable):

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Section B. Project proposal

B1. Enter a brief description of your proposal:

Briefly describe your project proposal. Outline the main reasons for seeking funding and what difference this would make to your local air quality. Provide further details in Section E. (Max 500 words)

The project intends to retro-fit Pirelli 'FeelPure DPF' emission control equipment to a Euro III bus operated by Phoenix Taxis on secured contracts mostly within Tyne and Wear. This will improve air quality in the areas in which it operates, which include some areas of poor public health indicators and locations adjacent to school premises. The bus is primarily used on a service mainly used by students (but available to all passengers) during school terms. The bus will be used on Nexus secured services, mostly in areas of North Tyneside, during evenings and Sundays.

B2. Fit with other bids:

Explain any connection with another outstanding bid or grant from DfT such as Local Sustainable Transport Fund, Green Bus Fund and Better Bus Areas Fund. Please note that a bid for Clean Bus Technology Fund is not dependant on success in another bid. (Max 200 words)

None.

Section C. Proposed technology

C1. Describe the proposed NOx abatement technology for your scheme.

Indicate what method of NO_x abatement technology you are planning to use; e.g. retrofitting, engine replacement, engine retuning, hybrid conversion or other innovative solution; your rationale for choosing this and the risks it may present. (Max 200 words)

The equipment is a relatively straightforward retrofit which would take place in the operator's own garage. There are not felt to be any major installation risks. An Eminox SCR/SCRT system was investigated but, according to the operator, was incompatible with the engine in the bus.

C2. Describe the expected environmental impact of the chosen technology in terms of emissions reductions.

Provide an estimate of reductions in NOx emissions and any expected change in particulate matter and carbon dioxide emissions per bus (in kg or tonnes). (Max 200 words)

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The equipment manufacturer states that NO2 reduction will be around 50%. Furthermore, PM10 particulates will be reduced by over 90%. NO and NH3 will not be reduced or increased.

Actual measurements for the bus model or the specific vehicle are not available, but based on a typical estimate of 0.5g NO2/km emitted pre-retrofit, the 50% reduction would be likely to lead to a total reduction of 0.5g X 50% X 120,000km X 5 years = 150,000g or 150kg of NO2, over the lifetime of the project. The reductions would be likely to be increased from this figure because the operator anticipates running the bus for 1-2 years more than the 5-year lifetime of the Clean Bus Technology Fund.

Section D. About the local buses

D1.	*** In total, how many buses do you expect to modify?**	1
	Bus types (make and model):	Optare Solo [2003]
	Name of engine manufacturer (of each type, if known):	Mercedes
	* Euro Standard (of each type):	III
	* Estimated average annual bus mileage:	120,000 km
	* Expected change in annual bus mileage as a result of vehicle modification:	None
	* Will the modification extend the lifetime of the buses? If so, how long for?	Yes, by making it more commercially viable, likely to increase lifetime by approx 2 yrs
	Number of single-deckers:	1
	Number of double-deckers:	0
	* Estimated cost of purchasing and fitting technology per bus:	£4,120
	* Estimated additional operating costs/savings (including fuel) per bus over five years:	A modest cost for cleaning the filter each year. It is not believed that there will be

	additional fuel usage.
* Estimated additional maintenance costs/savings per bus over five years:	Not anticipated to be any significant change (+ or -) in maintenance costs
* DfT funding sought per bus (i.e. excluding other contributions):	£4,120

D2. Geographical area, bus routes and bus operator(s):

Describe the geographical area covered by this proposal, which bus routes will be upgraded with NOx abatement technology and who the operators are. (Max 200 words)

The bus will operate flexibly across the Phoenix Taxis' operations, mostly on various routes 'secured' by Nexus within North Tyneside, Tyne and Wear. These include service 19 from North Shields Ferry to Northumberland Park via Cobalt Business Park, service 333 in North Shields and a service mainly for schools from Killingworth to St Thomas More Academy in North Shields. The origin/termination of some routes will be in Blyth, Northumberland.

D3. Level of CO_2 emissions and Nitrogen dioxide (NO_2) ambient concentrations:

Describe the trends and current state of NOx emissions and ambient roadside concentration levels of NO_2 in the geographical area identified above, comparing the latter in terms of EU concentration limit values. If available, include any additional statistics, such as road lengths assessed that exceed the EU concentration limit values, details of any Air Quality Management Areas, observed and forecast impact on health and local environment. (Max 200 words)

The areas within North Tyneside that would be covered by the bus' operations are not currently in AQMAs, and generally the local Council's reporting does not indicate any substantial problem with NOx or other pollutants within its boundaries. However, in 2013 there were a small number of particulate exceedences at the Council's East Howdon monitoring station, which is close to the North Shields area where the bus would be operating for some of the time.

The town centre of Blyth, from which some of the routes would originate or terminate, has in the past been declared an AQMA, although it is understood that this status was rescinded in 2012.

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D4. Describe your future plans for use of the modified buses.

Explain how you can ensure that modified buses are used for at least five years on some of the most polluted roads within your locality or any within other local authority boundary in England (without subsequent removal of abatement technology or other reversal of modifications) . (Max 200 words)

The operator has recently purchased the bus on a second-hand basis, and has a long-standing practice of holding such vehicles for around 6-7 years; it sees no reason why this bus should not reach the same lifetime.

Section E. Project and financial governance

E1. Project and risk management:

Provide the name of your project, timeline, milestones, risks to successful delivery and the mitigation actions you propose to take to minimise these. You should any include impact on end users and actions you will take to control particulate matter (PM) and ammonia concentrations when reducing NOx. Provide impact on bus operators under Section D1. (Max 500 words)

Given the modest scale of the project, and the close direct contact Nexus will have with the operator (as the bus will operate largely on Nexus-secured routes), there are not envisaged to be any significant risks to either installation of the target equipment, or in the monitoring of the vehicle. Nexus will not release any funds to the operator until they have confirmed installation of the Pirelli equipment.

The manufacturers have stated that Ammonia production does not increase (or decrease) when this equipment is fitted. However, particulates should be reduced by a minimum of 90%.

E2. Progress report:

You will be required to monitor the progress of your project and update DfT every two months using a template. Your report should include the technology used to upgrade the buses, the number of buses upgraded, new risks you have identified and the mitigation actions you plan to take. Identify additional intermediate outputs and outcomes you will report on and if applicable, the web-site on which results will be made available. Include the name of your project, timeline and milestones. (Max 200 words)

If the funding were approved, it would be expected that the bus would be retrofitted by September 2013. Nexus are willing to provide 2-monthly updates.

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E3. Sharing best practice:

The main objective of the scheme is to establish whether a national programme could be supported and rolled out based on the success of the individual projects, whether such technologies could be used in other local authority areas, and expected future interest from local authorities and bus operators. Describe how best practice can be shared, technology transferred and how you can coordinate your outcomes with other successful bidders. (Max 200 words)

Phoenix are willing to make available to other operators their experience of retrofitting and running/maintaining the upgraded bus, if requested.

E4. Contributing to Government Growth Agenda:

Describe how your bid can support local and national growth opportunities. Collaboration with other authorities to share resources and the use of apprentices is encouraged where appropriate. (Max 200 words)

The bus will be used on two routes in particular which are directly linked to employment opportunities/sites: the major Cobalt business park, and the Shields Ferry link to employment sites in South Tyneside. This supports the aim of Policy 14 of the draft LEP transport strategy, and it should further be noted that the bus will be operating in the LEP's main identified growth area around the A19 corridor.

Furthermore, Phoenix employ two apprentice fitters, who will be given direct experience of this type of retro-fit process, thereby enhancing their skills and future employability.

E5. Outsourcing:

Describe details of any outsourcing you will use for project delivery, legal advice, modelling, assessment or engineering. Provide anticipated costs under Section E7. (Max 200 words)

No outsourcing.

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N.B. Questions in the table below with asterisks (*) are mandatory.

E6.	*** Total DfT funding contribution sought (up to £1,000,000):**	£4,120
E7.	*** Total estimated cost of outsourcing and operational costs (£):**	£4,120
E8.	**If applicable, local authority contribution (£):**	None
E9.	**If applicable, other contribution (e.g. bus operator) (£):**	None
E10.	***TOTAL ESTIMATED COST OF PROJECT:**	£4,120

Section F. Supporting evidence

F1. Please use this space to provide any additional evidence for your proposal. (Max 500 words)

Tackling Air Quality Problems in Tyne and Wear

The Tyne and Wear ITA and its partner authorities recognise the hazards to health and the heightened risk of premature death towards which poor air quality can contribute. Our key transport policies are designed to mitigate these risks by encouraging carbon-free movement on foot and by bike, reducing the need to make journeys by car, and promoting the use of public transport, including buses.

We understand however that in terms of NOx emissions, buses can be part of the problem, and therefore welcome the opportunity that the Clean Bus Technology Fund offers in terms of providing a practical and quick solution that improves local air quality and enables otherwise serviceable and accessible vehicles to continue to play their part in increasing the proportion of trips made by public transport.

It is in this context that the three bids for the Tyne and Wear area have been formulated. One focuses on solving issues in a formal Air Quality Management Area in central NewcastleGateshead through partnership working between a major operator and the local councils, tackling air quality issues head-on along routes that are densely urban throughout; one focuses on a major congestion corridor; the third, smaller, bid will enable one of the smaller-scale operators who provide secured bus services across the area to upgrade one of its fleet so that emissions levels improve across the range of schools and local services on which it is used.

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This approach complements the key strategic aims of the ITA's Bus Strategy, and the third Local Transport Plan for Tyne and Wear. The Bus Strategy highlights the cost to the economy in health and productivity terms that poor air quality can cause, and prescribes increased bus use as part of the solution; therefore the cleaner buses are, the easier it will be to tackle this problem. One of the deliverables of the strategy is to set improved environmental standards for the bus fleet, and the retro-fitting of technology through this bid will be a tangible means of achieving this.

The Tyne and Wear approach to tackling air quality also reflects the principles adopted within the 2011-21 Local Transport Plan, and the 2013 Tyne and Wear Air Quality Delivery Plan. The LTP addresses the challenge of reducing the social and economic costs of transport to public health through measures such as continuing to work with bus and fleet managers to encourage the uptake of low emission vehicles. In turn, the Air Quality Delivery Plan sets out a range of practical measures aimed at improving the current situation, including Measure 8.2 which proposes the upgrading of bus fleets in AQMAs and future AQMAs. The three bids from the Tyne and Wear area therefore reflect the ITA's commitment towards improving air quality, by ensuring that harmful emissions from buses are reduced to as low a level as possible across the conurbation.

Email your completed form to: CBTF@dft.gsi.gov.uk by 17:00, Friday 19 July 2013 in MS Word 2003 or PDF format. Please also send two hard copies to: Air Quality Strategy, Department for Transport, Zone 1/33, Great Minster House, 33 Horseferry Road, London SW1P 4DR.