'Urban regeneration', 'modal shift', 'low emissions' - buzz words aimed at improving public transport and the street environment.

There's no doubt something's got to be done and not just because of congestion and air pollution.

Global warming is a huge problem that needs to be prevented, by doing whatever it takes. We need bold decisions.

But many proposed 'solutions' are either impracticable or impossibly expensive.

We need to do something that will make a difference, using technology that isn't an expensive experiment but is well proven and affordable.

And for urban transit, there is just such a solution in use the world over, which should be used on British streets.

This leaflet aims to tell you why this solution is important.
Buses have an unenviable reputation as transport of ‘last resort’. They are currently only thriving where alternatives are seen to be even worse. Yet the bus is a carbon efficient concept.

Something is needed that can appeal to many and so reduce congestion by voluntary choice. It needs to be something that not only looks good and is comfortable, but is quiet and smooth, fast without being jerky and gets preferential treatment along its route over all other traffic.

If that can also have total zero emissions at street level and the ability to have of no emissions whatever throughout its entire system, then this has to be a winner. As fossil fuels become evermore expensive, and their impacts become harder to contain, then electricity for motive power from non-polluting sources is the only alternative.

We have long been at a point where carcinogenic and poisonous pollutants from road transport cause serious health problems, including asthma in children and premature deaths.

But now climate change is fast becoming such a threat to our way of life that all planning decisions need to reduce the greenhouse gases produced by the way we live. It is becoming clear that simply tinkering with pollution and risking catastrophic damage to our planet is not an option.

Up until now we’ve been able to ignore the wider implications of car ownership, centralised power stations, and unrestrained air travel. Luxury living that’s not at the expense of the planet, is going to be a tough nut to crack. But letting the Thames Barrier be breached is not an option - we need solutions that are practical and appealing too.
Electric motors are uniquely clean and powerful, which is why all recent attempts at new and not so new forms of public road transport feature them. But a perceived difficulty is how to get electricity to the motors in an efficient way, so as not to produce a 'solution' that contravenes a prime overall objective of energy efficiency.

There has been an assumption in the UK that buses ought to be free to run in an ad hoc way, like cars, despite buses being intrinsically bound to routes that have to be defined for passengers to use them.

Hybrid and Fuel Cell buses have been promoted as urban transport future solutions. They accept the need for electric drives to supply some of the benefits of electric traction but add the bolting-on of much complexity to achieve the dubious requirement of a 'flexibility' to go anywhere.

Fuel cell buses have a 'green' charisma, because of the elimination of pollution at the point of use, but have to carry a virtual power station onboard, producing a very expensive and highly inefficient vehicle which is not at all 'green'.

Hybrids are not really clean, they are simply less dirty than simple diesels. Both of these technologies seem to be classic examples of 'quick-fix' thinking or 'being seen to do something' while ignoring the full implications.

Trams use electric motors, are energy efficient and carry a lot of people. They are attractive and passengers like them. But they are tied to rails and are thus operationally inflexible even in respect of minor problems. They are also extremely expensive to install - as recent British projects have demonstrated. Rails have to have all utilities, water, sewerage, gas and electricity, removed from under them if services are not to stop whenever maintenance is needed.

Tramways can only be justified for a very limited set of corridors in a small number of major cities and are not going to be able to make the sea-change that is required in public transport to achieve the environmental and health benefits that are so desperately needed.

But there is a form of transport that has all the environmental benefits of trams, is attractive to passengers but costs far less, because no rails are needed. The rubber tyred alternative to the tram, the trolleybus, is a form of transport that is quiet and smooth, fast and efficient. It has the flexibility to drive around obstructions and can use reserved carriageways. It is as energy efficient as the rail bound tram and much more so than diesel, hybrid or fuel cell vehicles.

Trolleybuses have proven public appeal across the world with their overhead wires indicating a commitment to high quality public transport service. Modern trolleybuses can use auxiliary power to run 'off wire' in historic city centres. They don't require expensively equipped depots.

Trolleybuses are such a good solution to the problem of energy efficient, non-polluting transport that there are over 350 systems and vehicle numbers are increasing around the world. Universally liked by passengers, they encourage a voluntary change of mode, reduce congestion, environmental damage, air pollution and health costs. Now is the time for the UK to introduce electric trolleybuses.
The Electric Tbus Group consists of interested and concerned individuals, commentators and professionals who are working to bring about the widespread acceptance and implementation of electric trolleybus technology. See www.tbus.org.uk for more. ©2007 The Electric Tbus Group.