



**From Marjory Rodger MA MBA
Director, Government Relations**

05 January 2006

Dear Professor Maxwell,

RSE Inquiry into Energy Issues for Scotland

As the trade association for bus, coach and light rail, the Confederation of Passenger Transport UK is pleased to be given the opportunity to contribute to the Inquiry specified above. CPT members operate approximately 95 % of Scotland's registered bus service network.

I find it difficult to give precise answers to the eight questions posed - although I fully appreciate why they have been asked. The supply and cost of fuel, and the development of alternative fuels are of great importance to our industry.

Although 85% of the national network is operated on a commercial basis in a free market setting, bus and coach travel are seen as essential service providers which can play an important part in reducing social exclusion. Even though the rise on car ownership over the past four decades mirrors the downward spiral in passenger numbers, approximately one third of Scots still do not have access to a car, and many more only have limited access. CPT's members are under constant pressure to invest in new accessible vehicles, retain marginal routes, and keep fares affordable. To offer a viable alternative to the car, the industry has simplified networks, improved information and is investing in new technology - such as real time bus time table information accessed through mobile phones. Such measures have resulted in stopping the fall in passenger numbers and shown passenger increased numbers during each of the past six years. We recognise that we have to improve the image of bus and coach and change perceptions. Scottish Consumer Council research showed that satisfaction is much higher amongst users than non-users.

Car ownership is lowest in our cities, in Glasgow almost 40% of the population are reliant upon public transport and bus accounts for 70% of Scottish public transport journeys. In rural areas, car ownership is higher but wages often lower, so many cars tend to be older and therefore not environmentally friendly.

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Congestion is a major factor in urban areas and imposes an increasing constraint on economic growth. Efficient use of road space is essential. UK motorists do not pay the full cost of motoring. CPT sees enforced bus priority measures coupled with a strong car parking policy / workplace charging as effective measures to help combat congestion problems, and by so doing, improving air quality. Demonstrably improved bus running speeds are central to attracting people out of cars. The use of multiple occupancy vehicles must be promoted and encouraged: the waste of single occupancy vehicles heavily discouraged.

Having done this scene setting, I will now address your questions.

1. Over 70% of Scotland's services are operated by two of the UK's five big groups - First Group and Stagecoach. To get the most competitive price from suppliers, the big groups take decisions relating to energy requirements and associated strategies on a UK basis for all their operating companies.

The responses in italics are those given by the Stagecoach Group - who operate three companies in Scotland - and serve both urban and rural areas. They are:

- Stagecoach Western (Dumfries & Galloway/ Ayrshires/ Glasgow)
- Stagecoach Fife (mainly Fife but with express services to Edinburgh, Perth, Dundee and Glasgow)
- Stagecoach Bluebird (Aberdeenshire, Moray, Perthshire and Highland)

CPT believes that Stagecoach's responses are in keeping with most large operators' policies and understanding.

1. *Infrastructure changes:*

a. *5 years - more buses operating using current diesel engine technology with various small projects being used to check the suitability and reliability of hybrid technology. The use of diesel/biodiesel fuel will probably be expanded provided if it can be supplied.*

Stagecoach are currently running trials with a 95%/5% fuel in the North East and North West of England. The trial is being carried out because the fuel supplier has approved the fuel to the same standards that are supplied to fossil fuel and as such does not compromise engine supplier warranties

b. *15 years - In this time frame all buses and coaches will be Disability Discrimination Act compliant. We expect that a higher mix of biofuel will have been developed, to give maybe as high as a 15% or 20% biomass content. The amount of biomass mix is a trade off and it is our understanding that a 15 to 20% mix will give optimum performance and not have any effect on engine reliability or supplier warranties.*

The use of hybrid buses will have increased — using a diesel engine as the power/generator for the electrical drive. The type of diesel engine being used will be different from those supplied today, they will be virtually emission free, this will be achieved by a combination of current technologies — selective catalytic reduction and exhaust gas re circulation (SCR, EGR). The hybrid drives would only be viable on urban operations though some testing on longer distance systems will be taking place. Interurban coaches would still require diesel engine powered vehicles

c. *30 years — all new buses will have hybrid drives but still using very efficient and emission free diesel engines as the power/generator for the electrical drive. Some engine suppliers will be offering Ethanol fuelled power units. Reliable hydrogen fuel cell drives will be available; these will use stored hydrogen and will require storage/generation plants to be developed.*

Other more exotic fuels will be in development

d. 45 years — hydrogen fuel cell buses will be in use where the hydrogen is generated on board — a direct conversion of water. This would reduce the need for hydrogen filling stations.

2. Some of CPT's large members, including First Group and Stagecoach, in conjunction with some of our associate supplier members, have spent considerable resources developing and testing alternative fuels.

2. I do not believe that a 100% biofuel e.g. bio diesel or ethanol offers a competitive alternative to fossil fuels. The cost and the energy needed to produce it do not make economical or environmental sense. The costs to develop engines to run on biofuel will run into millions of pounds for the engine manufacturers. As operators we demand longer and longer warranty from our suppliers and in order to achieve this power units have to be developed, simply manufacturing a biofuel independently of engine manufacturers is not creditable.

Fossil fuel — albeit blended - will be used in bus operation for at least the next 30 years, not only in new buses but the UK bus fleet size must be taken into account. Normally buses are expected to remain in operation for at least 15 years. Operators would have to be given incentives to replace older buses before life expired

3. Scotland's fuel requirements are not treated any differently than the rest of the UK.

4.

5.

6. If different energy demands were identified for Scotland it would split the resources of the major suppliers.

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I hope that the above is of assistance to you.
CPT will be happy to provide more information on any point raised.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Marjorie Hogg'. The signature is written in a cursive style with a large, sweeping initial 'M'.