**Edinburgh Bus Users Group response to the call for evidence by the Cross-Party Group on Sustainable Transport inquiry into cutting emissions from public transport.**

Edinburgh Bus Users’ Group (EBUG) is a campaign which aims to provide a voice for bus users; to protect and improve Edinburgh’s bus network. EBUG is concerned with bus services within the City of Edinburgh Council area and those which cross its boundary. It is user/supporter led, independent of any operator, local or national authority, political party or trade union.

Whilst our response is concerned with buses, some issues are shared with, for example, rail and ferries (and even freight), and the text of our response highlights this where particularly relevant.

1. Decarbonisation strategy and priorities

1.1 What are the primary benefits of pursuing a zero-carbon public transport system (e.g. in terms of transport operations, the environment, public health, society/communities, and the economy)? Do you see any drawbacks of decarbonisation? As far as possible, please provide an evidence base to support your views.

The primary benefits of pursuing a zero-carbon public transport system are that it contributes towards a low/zero-carbon society, and the benefits that entails. The drawbacks, if that is the right word, are the risks of following inappropriate paths towards that goal, as set out below.

1.2 Should government follow a strictly technology-neutral approach (e.g. based on carbon-abatement potential or value-for-money), or should it pick specific public transport technologies to support (e.g. favouring one fuel over another)? Please explain your rationale here.

This is not necessarily a dichotomy. If government is involved, as it must be, it cannot be technology-neutral, as it will have to support particular technologies at particular times. See also question 2.2.

As in other crises, government must be led by the science. This implies certain basic principles; the primary objective being to reduce energy consumption across the building, manufacturing and operating chains. The second objective being to use renewable and zero-carbon power sources, also across building, manufacturing and operating.

The CPG has already heard, in the evidence sessions, the advantages and disadvantages of particular power sources for public transport. An impartial observer of developments in this area over the past five years would probably consider the evidence as ‘settled’; i.e. a primary focus on renewable electricity, with renewal hydrogen or ammonia only for applications where electricity is not feasible.

(NB the point is sometimes made that batteries, hydrogen, ammonia etc are energy storage systems rather than power sources. For present purposes this is perhaps academic, although the impact of transmission/translation losses does need to be considered.)

1.3 What should be the immediate priorities in decarbonising public transport (short-run; within the next 1-2 years), and which interventions might be better phased for the medium-run (say 3-5 years) and the long-run (say 5-15 years)? For example, you may want to comment on issues such as: energy supply, fuel & vehicle technologies, infrastructure requirements, or economy-wide issues such as the labour force and skills.

The focus should be on the 80-20 split (prioritising initiatives that achieve 80% of the objective for 20% of the effort, rather than 20% of the objective for 80% of the effort). The solutions are generally known, albeit resisted in some quarters. In particular, proven low-tech options, properly implemented, such as fast, frequent, reliable, well-used buses produce a fraction of the carbon that a car-based transport system does. The same applies to rail and ferries. This means achieving significant modal shift towards these most efficient modes. We cite most recently the Climate Change Committee’s 2023 Progress Report to Parliament (UK), especially page 128:

The Government should launch a more strategic review (of road-building projects to assess whether they are consistent with its environmental goals)…Measures to reduce car demand – whether through reducing the need to travel, modal shift or shared mobility – present an important opportunity…support local transport authorities in refreshing their local transport plans (especially on carbon)

The CCC is reporting to the UK Parliament, but it is relevant to the Scottish Parliament too.

While this is in progress, replacement of fossil-fuelled by zero-carbon vehicles can take place. Note that wholesale and immediate replacement of fossil-fuelled fleets, even if it was feasible, is not zero-carbon friendly, given the embedded carbon wasted in prematurely scrapping perfectly serviceable vehicles.

2. Decarbonisation and the economy

2.1 What economic opportunities would be afforded by pursuing decarbonisation of Scotland’s public transport (e.g. manufacturing base, employment)?

2.2 Should the Scottish Government intervene to assist in the development of Scotland's industrial base in zero-carbon transport technologies, and if so, how? What barriers does it face in providing this support?

Probably, within reason. A long and distant supply chain will itself tend to generate carbon inefficiencies. To refer back to question 1.2, it almost inevitably means the Scottish Government cannot be technology-neutral.

2.3 Should the UK Government intervene to assist in the development of Scotland's industrial base in zero-carbon transport technologies, and if so, how? What barriers does it face in providing this support?

Any UK Government role should reflect and respect the devolution settlement.

2.4 How can policy-makers ensure that local supply chains benefit from the transition to zero-carbon public transport?

2.5 Given current financial circumstances, do you have views on how the decarbonisation of the Scottish transport system can and should be financed?

By reducing expenditure on carbon-intensive activities, as outlined in reply to question 1.3

3. Overcoming barriers to decarbonisation

3.1 What are the key barriers to public transport operators in moving to a decarbonised fleet (buses, trains, ferries)? How can these barriers be mitigated?

Our response to this question and question 3.2 is essentially the same. The overriding barrier is political. The uncertainty provoked by shifts in governments’ commitments undermine the confidence and certainty that are required by operators and suppliers in order to invest, and ultimately increase costs. It is sometimes difficult even to judge the strength of government commitment to tackling climate change at all.

Transport campaigners are used to conflicting government policies. As one example; the UK Treasury appears to have a cultural antipathy to public transport, for reasons which need not concern us here. The consequence, however, has been seriously to inhibit the development of low-carbon public transport.

One glaring example is railway electrification, although the Scottish Government has been much more consistent than the UK Government; which, since 2000, has been alternatively pro-electrification, then electrification-sceptic, then pro-electrification, electrification-sceptic, and is currently in a kind of in-between phase.

With regard to buses, the issues are clear. The study by KPMG for the Confederation of Passenger Transport (Trends in Scottish Bus Patronage, 2017) identified the factors behind the decline in bus patronage, which was consistent after WW2. (Although it has stabilised somewhat). The remedies are generally understood, but there has been a marked reluctance to implement them widely. Consequently, there have not been the extensive customer and revenue bases to encourage significant investment.

3.2 What are the key barriers faced by industry suppliers in putting in place the infrastructure required for the operation of low- or zero-carbon buses, trains and ferries? How can these barriers be mitigated?

3.3 What action needs to be taken to ensure the availability of adequate electricity supply for the decarbonisation of public transport?