17/03/2022 10:00 - 12:00 Via MS Teams

Bus Decarbonisation Taskforce – Meeting 5

Taskforce Members			
Organisation	Name	Remark	
HSBC	Robert King	Chair (rotating)	
Transport Scotland	Stuart Greig	Co-chair	
Confederation of Passenger	Paul White	Present	
Transport (Scotland)			
Confederation of Passenger Transport (Scotland)	Duncan Cameron	Apologies	
Confederation of Passenger Transport (Scotland)	Fiona Doherty	Apologies	
Confederation of Passenger Transport (Scotland)	Colin Craig	Present	
First Bus	John Dowie	Present	
Stagecoach	Sam Greer	Present	
Scottish and Southern	Chris Burchell	Apologies	
Electricity Networks		-	
Alexander Dennis Ltd.	Paul Davies	Present	
Wrightbus (FUZE fin)	Ben Werth	Attending in place of Tom Greenshields	
Switch Mobility (formerly known as Optare)	Robert Drewery	Present	
Zenobe	Steven Meersman	Present	
Scottish Enterprise	Linda Hanna	Present	
Scottish Power	Chris Carberry	Present	
Scottish National Investment Bank	Alastair McMillen	Apologies	
Lloyds	Victoria Whitehead	Present	
Association of Transport	John Berry	Present	
Co-ordinating officers		-	
Transport Scotland	Bettina Sizeland	Present	
BOC	Scott Chudleigh	Attending in place of Geraint Bruton	
Scottish Futures Trust	Andrew Bruce	Guest	
Association of Transport Co-ordinating officers	Margaret Roy	Guest	
Hitachi	Mike Nugent	Guest	

I. Welcome, updates since previous meeting, and implications of the war in Ukraine

- 1.1. Welcomes were given and apologies were noted. The co-chair introduced Bettina Sizeland – the new director for Bus, Accessibility and Active Travel within Transport Scotland.
- 1.2. The co-chair summarised the open letter regarding Ukraine, from the Cabinet Secretary for Economy and Finance. Members were reviewing their own business links with Russia.
- 1.3. The co-chair invited Sara Grainger to summarise the Institutional Investors' Roundtable event held in Glasgow during COP26. Institutional investors' (pension funds, sovereign wealth funds, government reserve funds etc.) key areas of interest were;
 - Green mobility solutions to trial, develop and improve on these solutions with an intention on the model being deployed more widely in the global south.
 - Large-scale projects, with collaboration built-in from the start and with integrated governance over all aspects (operations, vehicles, infrastructure, energy) of decarbonisation projects, including hydrogen.
 - The Mobility-as-a-Service (MaaS) model whereby vehicles, infrastructure and maintenance are combined into one monthly payment or similar operational cost basis.
- 1.4. Scotland's scale, diverse geography and commitment to decarbonisation was recognised by the IRR as being well-suited to developing solutions which can be replicated internationally.

2. Review of the draft Pathway

- 2.1. The Chair invited the Taskforce to review the draft Pathway, as set out in Paper 5, and identify whether changes would be needed, in particular to encourage smaller and rural operators to keep pace with larger, urban bus operators.
- 2.2. The chair invited the Taskforce to discuss the issues up to page 13 in the paper. The Taskforce discussed leasing models, and agreed that the leasing model may be appropriate for some businesses particularly SMEs in certain contexts, however, financiers will be keen to see that the risk of lock-in to one operator or to one locality is sufficiently addressed.
- 2.3. Leasing vehicles is inherently more expensive than outright purchase and that it is not possible to eradicate this cost, which will likely be passed onto the customer as a passenger or as a taxpayer via their local authority.
- 2.4. The issue of scale in the context of the Institutional Investors' Roundtable - and how to deliver this in Scotland was discussed. The dispersed nature of bus ownership was highlighted as a strategic challenge for large-scale decarbonisation projects in rural areas where range remains an issue, however,

financiers would respond well to local authorities working as the aggregator to pull together projects.

- 2.5. Reducing the physical footprint of charging infrastructure would enable more efficient decarbonisation. This was highlighted as an opportunity for innovation, research and development. **ACTION: SECRETARIAT TO ADD TO PATHWAY.**
- 2.6. The possibility of local authorities purchasing zero emission vehicles and contracting operators to run them was considered. The Taskforce also considered local authorities' contracts for supported bus services and agreed that the structure of LA tendering exercises and contracts need to be explored to ensure that they are not creating a barrier to faster decarbonisation, as some consider they are. ACTION: ATCO TO RAISE AWARENESS AMONGST LA PUBLIC TRANSPORT NETWORKS OF THE IMPORTANCE OF CARBON REDUCTION, AND SHARE IDEAS AND GOOD PRACTICE IN SUPPORTING DECARBONISATION.
- 2.7. The Chair invited the Taskforce to consider the potential role of repowering in the pathway. The supply chain for repowering is underdeveloped, and there is significant activity in countries to repower vehicles in other countries. However it is also common practice in many of these countries to operate buses for several years longer than in Scotland. Zemo is working to develop a certification process for repowered vehicles in line with ULEB and ZEB certification. Existing OEMs could potentially expand into the repowering market.
- 2.8. Views were mixed on vehicle repowering as a significant pathway to zero emissions with doubts expressed about whether repowering older vehicles will prove financially viable if the vehicle's chassis and coachwork fails before the investment in the drivetrain has been recouped.
- 2.9. The concept of repowering vehicles was supported, but repowering was recognised as a solution which still needs more development, given the inherent engineering complexities of repowering a vehicle whose chassis and coachwork is designed for a diesel drivetrain. Reservations were expressed about the engineering challenges which may follow from repowering vehicles and the impact on the chassis and coachwork, in addition to interoperability and compatibility of on-board systems. Members of the Taskforce expressed willingness to engage in development of the supply chain, quality assurance and technical development.
- 2.10. Second hand batteries, second hand vehicles and battery replacement are going to have a significant impact on the market and on decarbonisation. Real experience of zero emission vehicles is limited, particularly among SME operators and this needs further study. Experience also needs to be disseminated among all operators. Scrappage schemes were discussed as an alternative means of addressing legacy fleets, and while some expressed a preference for this model, the significance of greenhouse gas emissions from manufacturing buses in addition to those from operational greenhouse gases was also recognised by the Taskforce. **ACTION: TRANSPORT SCOTLAND TO**

EXPLORE POTENTIAL IMPACTS ON THE SECOND HAND MARKET, AND SME OPERATORS WHO RELY ON IT, OF THE SWIFT TRANSITION TO NEW ZERO EMISSION BUSES.

- 2.11. The Chair invited Sara Grainger to outline the review of ScotZEB Phase 1. She noted the Transport Minister's position regarding prioritising support for rural and SME operators from now on. The Taskforce discussed the tension between decarbonising a lot of buses fast (through support for operators with large fleets) and avoiding SME operators being left behind.
- 2.12. Bus operators welcomed the idea of lengthening the period of time for applications, as a means of improving the number and diversity of applications from SME operators and for considering hydrogen fuel technology.
- 2.13. The Chair invited all members to raise any gaps or insufficiencies in the draft Pathway. None were raised, and the Chair concluded that the taskforce was content that the pathway is sufficient and ready to finalise.

3. Steps to finalise the Pathway prior to launch

- 3.1. A visualisation of the Pathway was presented to the Taskforce for comment. Some minor artistic changes were requested but otherwise the Taskforce were supportive of the presentation.
- 3.2. It was noted that the product could be used to demonstrate to the travelling public, particularly young people, that significant work is going into keeping bus as the greenest, cleanest transport choice, which all members have a role in.
- 3.3. The Taskforce agreed that the views of Trades unions and Passenger representation groups should be sought on the draft Pathway prior to its finalisation. This will be taken forward by Transport Scotland, who will share the comments of those bodies with the Taskforce to agree any changes to the pathway by email before the next meeting.
- 3.4. The Taskforce agreed that the finalised Pathway should be launched to coincide with the Taskforce's next and final meeting.
- 3.5. The Taskforce were invited to consider other publicity which could link with the launch of the Pathway, e.g. launching their decarbonisation commitments and activities being undertaken by their organisation.
- 3.6. The next and final meeting of the Taskforce will be held in-person to launch the Pathway in June 2022.

ACTION: TRANSPORT SCOTLAND TO SEEK VIEWS OF TRADES UNIONS AND PASSENGER GROUPS ON THE DRAFT PATHWAY.

ACTION: ALL TASKFORCE MEMBERS TO CONSIDER HOW THEY CAN HELP PUBLICISE THE PATHWAY AND WORK OF THE TASKFORCE, WITH A VIEW

TO ENCOURAGING BOTH DECARBONISATION ACTION AND INCREASED BUS PATRONAGE, AHEAD OF THE NEXT MEETING.

ACTION: ALL TASKFORCE MEMBERS TO ARRANGE FOR LOGOS TO BE INCLUDED ON THE FINAL VERSION OF THE PATHWAY AHEAD OF THE NEXT MEETING.

ACTION: ALL TASKFORCE MEMBERS TO CONSIDER WHAT ACTIONS /ANNOUNCEMENTS / COMMITMENTS THEY CAN MAKE TO DEMONSTRATE COMMITMENT TO DELIVERY OF THE PATHWAY AT THE TIME OF ITS LAUNCH.

Reference	Action	Due Date	Status
BDT-13	Secretariat to make changes to the pathway agreed at this meeting, seek views of trades unions and passenger groups, and then seek agreement from the Taskforce electronically for its finalisation.	May 2022	Open
BDT-14	ATCO to raise awareness amongst LA public transport networks of the importance of carbon reduction, and share ideas and good practice in relation to contracts and tendering activity that enables and encourages zero-emission buses.	June 2022	Open
BDT-15	Transport Scotland to explore potential impacts on the second hand market, and SME operators who rely on it, of the swift transition to new zero emission buses.	June 2022	Open
BDT-16	All members to consider how they can publicise the pathway and the work of the Taskforce, to both encourage decarbonisation action and increased passenger numbers.	June 2022	Open
BDT-17	Member organisations to confirm consents for their organisation's logo for use on the finalised Pathway product, and consider what actions / announcements / commitments they can make to demonstrate commitment to delivery of the pathway at the time of its launch.	May 2022	Open