

10/08/2022

09:00 – 10:30

Alexander Dennis
Larbert

Bus Decarbonisation Taskforce – Final Meeting

Taskforce Members		
Organisation	Name	Remark
Transport Scotland	Stuart Greig	Chair
Minister for Transport	Jenny Gilruth MSP	Present
Alexander Dennis Ltd.	Paul Davies	Present
Wrightbus	Ian Gillot	Present
Switch Mobility	Peter Freedman	Present
Confederation of Passenger Transport (Scotland)	Duncan Cameron	Present
Confederation of Passenger Transport (Scotland)	Fiona Doherty	Apologies
Confederation of Passenger Transport (Scotland)	Andrew Lindsay	Attending in place of Paul White
Confederation of Passenger Transport (Scotland)	Colin Craig	Apologies
First Bus	Garry Birmingham	Present
Stagecoach	Douglas Robertson	Attending in place of Sam Greer
BOC	Scott Chudleigh	Present
Scottish and Southern Electricity Networks	Chris Burchell	Present
Scottish Power	Chris Carberry	Present
Switch Mobility	Peter Freedman	Present
Zenobē	Julia Meek	Attending in place of Steven Meersman
Hitachi	Mike Nugent	Present
Scottish Enterprise	Jane Martin	Present
Scottish National Investment Bank	Alastair McMillen	Present
Lloyds	Victoria Whitehead	Apologies
Association of Transport Co-ordinating officers	John Berry	Apologies
Transport Scotland	John Maxwell	Attending in place of Bettina Sizeland
HSBC	Robert E. King	Apologies

I. Progress to date (Paper 6.1)

- 1.1. Chair welcomed the members, for their attendance, and noted apologies. He summarised the work of the Taskforce since its inception in November 2020. He congratulated the members on overcoming significant challenges on the way to creating the Pathway.
- 1.2. Progress made on delivering zero emission bus fleets was noted in terms of investment for the bus industry, the supply chain, and in infrastructure. Next steps for delivering a zero-emission bus fleet in Scotland is to continue what has begun. The Chair invited reflections from the Taskforce.
- 1.3. Several Members reflected on the rapid pace of change, and the achievements which have been delivered in a very short timeframe. This pace of change was stretching, however the collaborative approach between stakeholders has meant that a lot has been achieved.
- 1.4. The next steps noted were to continue existing collaborations and build additional ones, including more small to medium sized operators, and other stakeholders not present on the Taskforce, and to build new business models for bus ownership and for bus operations. Future collaboration and the continued sharing of learning would be beneficial to making progress along the Pathway.
- 1.5. The Minister for Transport joined the meeting.
- 1.6. The Minister summarised the issues contemporaneous with the lifetime of the Taskforce; EU Exit; the pandemic; the introduction, lifting, and reintroduction of lockdowns; supply chain interruptions; the war in Ukraine; and the cost of living crisis and thanked members for their sustained efforts during very challenging times and congratulated them for the achievements.
- 1.7. The Minister for Transport informed the Taskforce of a new focus of policy – towards focussing more on smaller operators, and to expand the scope to include home-to-school transport, community transport, and the coach sector.
- 1.8. The Minister launched the new Zero Emission Bus Market Transition Scheme, worth £500,000 to assist any appropriate body to change the market and deliver the vision
- 1.9. The challenges facing the bus sector to attract passengers back onto buses and the unique challenges facing smaller operators to transition to operating zero emission fleets were noted by the Minister. The Minister invited comments from the Taskforce.
- 1.10. Members agreed that the pace of change has been uncomfortable, but a lot has been achieved through working closely together. The Taskforce agreed that the “do-nothing” alternative approach was also discussed, and the consensus of the Taskforce was that a decline in patronage being viewed as likely. The dirtiest vehicles have been replaced and cleaner vehicles have been cascaded, improving overall quality of fleets.
- 1.11. The Taskforce noted new physical and financial products have been developed, or are in development as a result of engagement through the Taskforce. Members considered that this was unlikely to have happened otherwise.

- 1.12. The Taskforce agreed that some operational, technology, and financial barriers remain outstanding, but they recognised benefits of collaboration in addition to those mentioned previously, such as avoiding duplication of infrastructure civil works.
- 1.13. Members agreed that decarbonising fleets is a “team sport” involving close working across supply chain, operators, energy suppliers, and financiers. Collaboration across transport functions outside public service buses facilitates a range of approaches which reflect operational, and financial challenges; e.g. fixed charging networks do not suit coach operators, who need a nation-wide network of charging points.
- 1.14. Both DNOs stated that they had received improved engagements from operators, and have noted the potential to aggregate demand in some cases, and stated their intentions to run learning sessions for small operators and other new ways of working with SMEs. Fruitful engagements with operators has also assisted with creating robust business plans to present to regulators.
- 1.15. The partnership approach was discussed by the Taskforce and its advantages in giving huge agility by bringing the financing, supply chain and operators together to act in tandem and noted the rarity of having competitors participating in the same forum to understand how to decarbonise the bus sector.
- 1.16. Members noted the importance of the role of public authorities to complement the efforts made in decarbonisation to effect increases in patronage and modal share. While patronage is out of scope of the Taskforce, the number and volume of decarbonisation projects will fall without increasing patronage.
- 1.17. Affordability for smaller operators, who operate on narrower margins and the high short-term capital outlay, was recognised as a barrier by the Taskforce. Routes to build economies of scale, and better connect small operators to expertise.
- 1.18. The Minister for Transport thanked the Taskforce for their contributions welcomed Taskforce members to continue their efforts to decarbonise Scotland’s buses before departing.

2. Final Pathway (Paper 6.2)

- 2.1. The Chair noted the closure of Action BDT-13 to discuss trade union engagement had progressed via correspondence. One action on upskilling the workforce and training was added to the Pathway and this was agreed by the Taskforce via correspondence.
- 2.2. The Chair noted the Scottish Zero Emission Bus Challenge Fund; uptake has been very positive, and subsidies have been reduced, but government needs to step back and maintain a watching brief on progress in some areas.
- 2.3. The Chair invited the Taskforce to review the Pathway document and suggest any final changes.
- 2.4. The Taskforce agreed no further changes were necessary and agreed to finalise and publish the Pathway to zero emission buses.

3. Commitments to delivery (Paper 6.3)

- 3.1. Scottish Government has commissioned Climate XChange, an academic research and knowledge hub for Climate Change to investigate the impact of decarbonisation on the second hand bus market and the subsequent impact on small operators. Element Energy have been contracted to undertake this work. Taskforce members were informed that Element Energy may contact them about this issue and were informed and invited to attend a webinar in November 2022 where the findings would be presented, alongside ideas and actions.
- 3.2. The Chair invited further discussion on the ScotZEB Market Transition Scheme.
- 3.3. The Scheme will run once and is intended to precede phase two of ScotZEB. The scope of eligibility includes home to school, community buses and coaches and funding is offered on a first-come; first-served basis. The Scheme will close when the funding is exhausted, or on 09 December.
 - Stream 1 is aimed at small to medium sized operators, and is designed to with the minimum administrative burden on these operators. Output is a 5-10 report which is to be published.
 - Stream 2 is aimed at building collaborative partnerships – aimed at anyone who wants to change the market for providing money and time for anybody, energy company, financier, collaborative investment proposition, bring forward competitive, innovative bids with large scale (over 100 buses) for ScotZEB phase 2 – Output is a 10-20 page report, although this won't be published due to commercial sensitivity.
 - Stream 3 – is to demonstrate repowering as an option for operators. Funding for charging infrastructure is not included and bids must set out collaboration with a university/research organisation – expected output is a ~50 page report to be published.
- 3.4. Discussion moved on to Phase two of the ScotZEB Challenge Fund. The Fund will open in financial year 2023-24, with drawdowns in 2023-24, 2024-25 and 2025-26. Subsidy caps will be lower than in phase one in line with the stated objective to reduce dependence on government to fund the transition. Eligibility not dependant on previous participation.
- 3.5. The Chair invited Taskforce members to discuss actions they are taking forward to deliver the vision.
- 3.6. Alexander-Dennis announced their development of a new zero-emission bus, smaller in size and focussing on smaller operators and rural operating conditions.
- 3.7. Stagecoach – skills 2 activity electrical safety. R&D centre 175 engineers gone through it. Apprenticeship to deliver the (72 people on vehicle maintenance) vehicle aspect. 2023 apprenticeship cohort already being trained to work with electrical elements of zero emission vehicles.
- 3.8. Discussion on skills moved on to other areas of shortage outside of technical skills, such as middle-management skills which have experienced difficulties in recruitment.
- 3.9. Scottish Enterprise announced the Zero Emission Mobility Innovation fund, worth £28m, which is aimed at supporting Scottish-based businesses to

scale the manufacture of prototype zero emission niche and HDV components, systems, and vehicles through Research & Development activities. This Fund will potentially provide match-funding to industries or collaborations to bring investment into Scotland in areas where there are gaps in supply chains.

- 3.10. The Chair opened discussion to other relevant areas.
- 3.11. The Taskforce agreed that there was an economic and environmental window of opportunity to decarbonise fleets by the end of 2020s. One of the remaining challenges lies with local authority processes, resourcing and timescales.
- 3.12. Comments on contrast of approach where funding is directed through local authorities were invited. The Taskforce reflected on the local-authority led approach, and agreed that this approach may have some advantages, it reduced economies of scale, due to the varying approaches taken by local transport authorities, competing for funding which has been more resource-intensive for applicants.
- 3.13. The Taskforce noted an additional challenge in driving down costs. Planning Authorities' imposition of local planning restrictions for battery storage farms – due to noise from cooling systems - were identified as a barrier. More opportunities for new revenue streams, such as using second-hand bus batteries in battery grid storage would address residual value risk for second hand battery asset owners. More battery storage schemes would create an active market for used EV batteries and therefore improve the commercials for fleet transition.
- 3.14. The Chair invited manufacturers to comment – attracting people into sector is difficult. Costs overall are increasing – energy, materials, parts, labour. Working with colleges to get the correct skillsets. Traditional apprenticeship schemes are too general for parts of the supply chain. Partnership working with colleges has improved things. Partnership with schools can improve diversity of applicants and improve intake has been tremendously successful in other engineering sectors. Marketing as “net zero and climate change” can drum up interest.

4. Any Other Business

- 4.1. No other business was discussed.

5. Close

- 5.1. The Chair thanked Alexander Dennis for hosting the meeting at their premises, thanked FirstBus and Stagecoach for supplying zero emission buses, and the Taskforce for their work and for attending.
- 5.2. The Taskforce agreed that while this would be the final meeting of the Taskforce, the partnership working should continue.
- 5.3. The Chair closed the meeting and concluded the Taskforce.

Reference	Action	Due Date	Status
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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	Closed
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	Closed
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	Closed
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	Closed
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	Closed