

**Minutes of the Zero Emission Truck Taskforce  
Meeting 2: Trials and supply chain  
23 June 2022, 9.30 – 11.30  
Microsoft Teams**

**Organisation**

Ballard Motive Solutions  
British Vehicle and Licensing Association  
Hitachi  
HV Systems  
John G Russell  
Menzies Distribution  
NEoT Capital  
Road Haulage Association  
ScottishPower  
Scottish Wholesale Association  
Society of Motor Manufacturers and Traders  
SSE plc  
STUC - UNITE  
Transport Scotland – Low Carbon Economy  
WH Malcolm Ltd

**Name**

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Stuart Greig (Co-chair)  
Gavin Summers

**1. Welcome and minutes of last meeting**

The minutes of 4<sup>th</sup> May 2022 were approved as an accurate record.

Action 1.1 (to make skills explicit in the draft Terms of Reference) was closed.

**2. Trials and supply chain**

Fay Dunkerley of Mott Macdonald consultants gave a brief overview of the content of Papers 1 (Trials of technologies to support HGV decarbonisation) and 2 (Impacts on the Supply Chain).

A general discussion then took place under the following broad areas.

Are the necessary trials underway to inform roll-out of zero emission HGVs in Scotland, or does this Taskforce need to instigate additional trials?

- The papers identify a reasonable number of trials, but suggest that data is not being widely shared. Potential reasons for this include:
  - timing (competitive tenders expected for future phases of UK government funding, so partners will be cautious until that is concluded)
  - to protect technology at an early stages of development, giving space for it to develop to an appropriate stage before performance is made public
  - competitive advantage (where an operator is funding the trial)

- While formal results may not be public, partners to a project may be able to share some learning or data with peers.
- However trials are about more than just the technical understanding of real world performance. They also offer an invaluable opportunity gain familiarity with a technology – to see it in use; to know peers are using it; for it to become accepted in a sector. This confidence building and “kicking of the tyres” is as important as the data around performance – the willingness of fleet managers and engineers is key to being able to transition.
- There does not yet seem to be a full package trial which looks at varied journeys on A and B roads with auxiliary equipment (refrigeration, tail lift etc).
- Members wish to see tangible results from trials, and to identify the appropriate balance between spreading any investment too thin and focusing on too small a microcosm, while recognising that some degree of segmentation on technology and journey types will be necessary.
- Credible messages need to be available to both operators and the finance community, in order that they seek to invest.

#### What involvement and information do financiers need from trials?

- Maximising the value of assets is of particular importance to any financial strategy. To that end, empirical data on battery life and improved understanding of battery parameters is key.
- The calculated residual value of ICE assets is based on full life data across many generations. This is not yet possible for ZE and will not be for some time. Other ways must be found – these are not classical investments.
- Real collaboration between the OEM, operator, energy and the finance partners is vital from the earliest stages – finance companies do not want to come in at the end of a trial. They seek to understand the technology and the environment that it requires so that appropriate warranties and use conditions can be put in place.
- They are interested in the full ecosystem, not solely the technology. As asset owners, they wish to ensure longevity of their assets, ie that appropriate support and maintenance are in place, that they are charged/ fuelled suitably etc.
- Analysis of the real world data builds confidence in the battery/ vehicle (depending on business model) even at early stages.
- Finance partners are looking for the aging curve of the whole ecosystem – they seek real world data and recognise the need to do it with other ecosystem partners.
- Some components may have additional usage/ value outside a vehicle, which then affects TCO.

#### How can we maximise the involvement of Scottish suppliers and Scottish R&D in the design and development of any trials?

- New entrant OEMs are likely to have a focus on getting to market quickly, which requires proven, mature components/ technology.
- Growing the capability and maturity of suppliers to provide this evidence is important – MSIP will support this.
- Grants and competitions which evaluate the use of Scottish suppliers as an award criterion could effect change.
- Engagement is needed to move suppliers from an ICE focus to a zero emission one – leaders need to be clear on exactly what is needed/ wanted.

- Skills support is required for existing and new technicians and engineers to equip them for the new zero emission world. This is not currently easy to find in Scotland – one member has sourced engineer training from abroad.
- In addition to skills support, workshops need specific hardware and tools to support zero emission vehicles.
- The opportunities for Scottish businesses should be understood more broadly than just the supply of components for vehicles. There is an opportunity to gain experience across the full spectrum of adaptations required for zero emission trucks, and in addition to support the development of local, sustainable distribution systems for food and other items.

### **DECISION**

The Taskforce will focus on battery electric and hydrogen fuel cell technologies for its pathway.

### **ACTIONS**

Taskforce members agreed that they need to:

1. Define clearly what we need to know (both the data outputs required and the range of contexts which will inspire confidence) – volunteer sought to work with operators and others to agree this
2. Establish whether that information can be gained from trials that are already complete/ underway/ planned, drawing on existing relationships and reaching out to Innovate UK and others – all members will consider what relationships and networks they have to support this (SMMT can provide a contact for Innovate UK)
3. Bring forward proposals for trials that will fill any gaps in the information needed. The Taskforce will consider how gaps in information needed can best be addressed and by whom – discussion at future meeting

### **3. Skills for the zero emission transition**

- Skills needs should be considered across vehicle types and the transport sector as a whole.
- OEMs offer some training to customers buying vehicles, but smaller operators buying second hand may need another source of that information.
- Unions note challenges around technicians for both inspection and repair; and safety concerns/ perceptions.
- The energy infrastructure required for vehicles will entail large building works, everything from transformers to plinths. Construction skills and sub-contractors may be in short supply, especially in remote and rural areas.

### **ACTION**

Liaise with Scottish Government Skills and Energy teams to highlight the construction skills requirements inherent in the move to zero emission transport - Secretariat

## 4. Draft Vision and amended Terms of Reference

A brief discussion took place around the phrase “Scotland achieves net zero by 2045 at the latest” and the role that many sectors have to play in achieving this goal. It was generally recognised that all sectors must play their part; that net zero is the end goal; and that what can be done now must and should be done now.

### **DECISION**

The Taskforce approved the draft Vision and amended Terms of Reference.

## Next meeting – 25<sup>th</sup> August 2022 - Infrastructure

### Action log

Reference	Action	Owner	Due date	Status
2.1	Define clearly what we need to know (both the data outputs required and the range of contexts which will inspire confidence)	Volunteer sought to work with operators and others to agree this	Autumn 2022	Open
2.2	Establish whether that information can be gained from trials that are already complete/ underway/ planned, drawing on existing relationships and reaching out to Innovate UK and others	All members	Ongoing	Open
2.3	Bring forward proposals for trials that will fill any gaps in the information needed. The Taskforce will consider how gaps in information needed can best be addressed and by whom	All members	Ongoing	Open
2.4	Liaise with Scottish Government Skills and Energy teams to highlight the construction skills requirements inherent in the move to zero emission transport	Secretariat	August 2022	Open