

## **Paper 4.2 First Draft Pathway and next steps for the Taskforce**

This paper provides a first draft pathway, based on the Taskforce's discussions to date, to enable the taskforce to consider whether it is on track to co-design a pathway to a zero-emission bus fleet by November 2021.

Please note both that the further steps needed in the manufacturing and supply-chain will be incorporated into the pathway following today's item on that subject.

The taskforce are invited to:

a) agree whether or not the "steps" on the pathway as set out in the draft are correct, necessary and sufficient to achieve the Taskforce's guiding vision, including whether planned UK Government regulation should be added;

b) note that the SNP manifesto commitment to remove the majority of diesel buses from public transport by 2023 has been included as a milestone in the draft pathway, and to discuss what bold and transformative steps can be incorporated into the pathway to achieve it;

c) agree what further work the Taskforce needs to undertake to fill any gaps or increase the comprehensiveness and/or quality of the pathway;

d) consider whether the pathway is agreeable ahead of November 2021, and if so whether a final meeting of the Taskforce to formalise the commitments of all members to deliver the steps could coincide with COP 26.

## Draft pathway

The purpose of the Taskforce is to co-design a pathway to a fully zero-emission bus fleet within one year of its first meeting in November 2020.

The first draft of a pathway is given on the following page. It aims to be clear that much progress has already been made, and that the pathway to a fully zero-emission bus sector requires actions within and between the finance, energy, operating, manufacturing and public sectors, with many of the steps required from now being increasingly multi-sector.

The pathway has been drafted based on the previous 3 taskforce meetings, setting out in one place the consensus reached on what is needed over the coming months and years to achieve the vision.

Following the present meeting, steps agreed by the Taskforce relating to the supply-chain and circular economy will be added. The Taskforce may wish to comment on the extent to which the steps agreed to date are necessary and sufficient to achieve the vision, whether planned UK Government regulations should be added and/or whether regulatory steps by the Scottish Parliament may be necessary.

No target date has been agreed as to when the entirety of Scotland's public service buses should be zero-emission and accordingly, few dates are given in the pathway. Some Scottish Government set milestones or targets have been included (including the manifesto commitment of the current Government to remove the majority of diesel buses from public transport by the end of 2023).

The sector to whom the steps, or actions, relate are indicated in the pathway by virtue of positioning and colouring but lead responsibility and target dates are not given. The taskforce may wish to consider whether any of the steps could or should be more explicit about which parties represented around the table are taking forward the necessary work.



## Recent

## to 2023

## 2023 onwards

Several operators have demonstrated battery-electric and/or hydrogen fuel cell buses

Leading operators have developed transition plans

Over £70 million investment in zero-

[SP Green Economy Fund for some battery-electric buses](#). And [OfGem Green Recovery scheme support for some depot electrifications](#)  
[Building 10.0 GW of secure non-intermittent renewable electricity generation capacity](#)  
Construction of electrolyzers in [Glasgow](#), [Aberdeen](#) and [Dundee](#)

Early exploration of options for financial products

Publication of information and ideas pack for finance solutions

In-depth exploration of total operating

Enhanced and comprehensive development of transition plans  
Collaboration across operators (including other vehicle types) & rationalisation of bus specification  
Piloting and demonstrating new business models

Joint mapping of depots in relation to grid and hydrogen potential, to inform joined up strategic planning

Amendments to processes for working with bus operators, to make process more transparent, easier to navigate and quicker where possible

Roll-out of financial products that will support zero-emission buses and infrastructure

[Some development of new models for battery and energy infrastructure financing and ownership](#)

## Milestones

Majority of diesel buses removed from public transport by end 2023

Fall in electricity prices of 12.2%, and increase in diesel of 18.6% by 2035.

By 2030, there will be 5GW of renewable/low carbon hydrogen by and at least 25 GW by 2045.

[Substantial and sustained innovation in zero emission technologies and quality improvements](#)

Next generation of battery chemistry currently in production

Extending lifespan of fuel cells and [electrolysers](#)

[Commercial-scale FCEB projects](#)

Supply chain next steps to be added

[Over £50 million investment in 272 buses in rounds 1 & 2 of SULEBS plus 5 year commitment to additional resource subsidy](#)

£120 million investment in zero-emission buses and associated infrastructure

## **Manifesto Commitment and next steps for the Taskforce**

Following the Scottish elections in May, the Scottish Government has a commitment to remove the majority of diesel buses from public transport by the end of 2023. The Taskforce are invited to consider additional steps that can be taken in the immediate future to help deliver that commitment as a milestone on the pathway to a fully decarbonised bus fleet, and whether the remit – or lifespan - of the Taskforce should be amended to support this.

Options for consideration could include:

- a) no change – the Taskforce agrees a pathway by November 2021 and all subsequent work to deliver the steps are taken forward by relevant parties in good faith that other steps are being progressed.
- b) additional meetings and/or subgroups are arranged between now and November to focus specifically on the immediate-term actions needed to deliver the 2023 milestone.
- c) extending the lifespan of the Taskforce until the end of 2023, and adjusting the remit towards delivering the Pathway as a programme until that point.

The originally intended end date for the Taskforce, November 2021, coincides with COP26 being hosted in Glasgow. This raises the possibility that the progress to date, and commitments by all parties on the Taskforce to deliver the steps on the pathway, could be championed publically at a point when media attention will be focussed on actions to tackle climate change.