

# MAYOR OF LONDON

**Andrew Boff AM**

Chair of the London Assembly  
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**Our ref:** MGLA141223-2135

**Date:** 11 June 2024

Dear Andrew,

Thank you for your letter about the motions agreed at the London Assembly (Plenary) meeting on 7 December 2023. My sincere apologies for the delay in responding to you. My reply to motion 3.3 is set out below.

## **Motion 3.3 - Role of hydrogen in London's future energy mix**

I recognise that hydrogen has a strategic role to play in the energy system and getting London and the UK to net zero. That role will be in decarbonising specific high-emitting sectors, such as industrial applications, transport and heavy goods vehicles, and also heat networks.

As noted in the motion, it is critical that for hydrogen to cut emissions, it must be green hydrogen, which is produced from renewable sources. Where hydrogen is made from natural gas without carbon capture and storage, it will result in more greenhouse gas emissions than just using natural gas directly. Carbon capture and storage remains in its infancy and is unlikely to play a significant role before 2030. It also perpetuates the exploration, abstraction, and use of fossil fuels, which we know we need to actively transition away from.

The analysis of the role of hydrogen in my chosen Accelerated Green Pathway was undertaken by Element Energy (now ERM), who are not just experts within the hydrogen sector but were critically an independent organisation. They took a realistic view on low carbon hydrogen supply to London in support of my net zero by 2030 target rather than estimating the maximum theoretical amount of supply and demand that could be identified across London. Furthermore, my Accelerated Green pathway provides a balanced approach from a number of different technologies and, whilst providing a guiding route to net zero, it in no way dictates quotas of technologies on the market or absolute levels of deployment. For these reasons, I do not see the need to re-evaluate the hydrogen assumptions within the Accelerated Green pathway at this time. However, we will continue to engage with the gas networks and businesses on the role of green hydrogen in London as we work towards net zero.

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I am aware of the Capital Hydrogen Programme, and my officers supported the engagement of the programme with strategic industrial hydrogen users in East London, and we will continue to do so as part of our work towards net zero. Similarly, my officers also engage with the Thames Estuary Growth Board on the work that they are doing with a range of stakeholders in relation to developing green hydrogen opportunities and, potentially, a hub in the area. My Deputy Mayor for Business has publicly highlighted how this project has the potential to help London become a world leader in green hydrogen and realise the jobs associated with that. The UK Government is well aware of the potential for green hydrogen and has been championing it for many years within the context of getting the UK to net zero, again particularly in the context of those hard to decarbonise high emitting sectors, such as industry. As such, I do not see any need to write to the Department for Energy Security and Net Zero at this time.

As with all climate action plans, it is important to periodically review them to ensure they remain relevant in our ever changing context and to engage key stakeholders in this process. My officers will do the same with the Accelerated Green pathway as we move towards 2030.

Thank you again for writing to me.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Sadiq Khan', with a small '2' written below the 'h'.

**Sadiq Khan**  
Mayor of London