

Subject:	Greater Brighton Hydrogen Group		
Date of Meeting:	26 January 2021		
Report of:	Chair, Officer Programme Board		
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Ward(s) affected:	All		

FOR GENERAL RELEASE**1. PURPOSE OF REPORT AND POLICY CONTEXT:**

- 1.1 This report provides an update on the progress of the Greater Brighton Hydrogen Group, a planned launch and future work towards developing a hydrogen economy and supply chain in the Greater Brighton and wider Sussex area.

2. RECOMMENDATIONS:

- 2.1 That the Board note the progress of and wide interest in the Greater Brighton Hydrogen Group, and its launch event planned for February 2021.
- 2.2 That the Board support the research into future demand for hydrogen in transport being carried out by the University of Brighton, Ricardo and Greater South East Energy Hub.
- 2.3 That the Board note and support the group in responding to opportunities for funding bids on hydrogen which are expected during 2021.

3. CONTEXT/ BACKGROUND INFORMATION:

- 3.1 In July 2020 the Greater Brighton Economic Board “The Board” in approved the [Greater Brighton Energy Plan](#). The Energy Plan articulated the ambition to position the Greater Brighton City Region as a hydrogen hub to transition to clean hydrogen economy for transport, heating and power.
- 3.2 Following on from agreeing the Energy Plan, in October 2020 the Greater Brighton Economic Board committed to 10 environmental pledges, [The GB10](#). The GB10 highlights five energy and five water plan projects which are priorities for the Board to meet the objectives set out in the plans. Decarbonisation of energy is a prominent theme within the 10 pledges, as several pledges involve decarbonisation in various forms.
- 3.3 Partners across the Greater Brighton City Region are exploring ways to transition to a low carbon economy. As part of that we are developing proposals and projects for the transition to hydrogen as an emission-free and more environmentally friendly fuel.

- 3.4 The Coast to Capital LEP 2020 investment strategy, Build Back Stronger, Smarter, Greener, includes the development of a hydrogen hub to accelerate public and private investment in hydrogen production and uptake.

Government policy on hydrogen

- 3.5 A hydrogen strategy was trailed in the Energy White Paper in December 2020, and is expected in spring 2021, along with hydrogen funding competitions (which could include funding for developing business plans). Hydrogen is also expected to feature in sectoral decarbonisation strategies, e.g. heat and transport, also expected in spring-summer 2021. A particular interest for government policy is 'super places' where delivery can be maximised through coordination of various actors and projects.

Local hydrogen actions

- 3.6 Recent activity within Greater Brighton includes;
- Ricardo received a provisional funding award for a hydrogen engine testing facility in 2020
 - Shoreham Port has a hydrogen production facility at pre-planning stage
 - Brighton & Hove Buses is aiming for a zero-carbon fleet by 2030 and is actively looking at potential hydrogen bus models and infrastructure as well as electric buses.
 - A number of fleet managers are reviewing the potential for decarbonising their fleets over the next decade, with a range of electric and (in due course) hydrogen powered vehicles.

The Greater Brighton Hydrogen Group

- 3.7 The Greater Brighton Hydrogen Group was established in September 2020. Membership of the group is open and continues to grow. The group now includes local authorities, universities, major consultancies, utilities (gas, electricity and water), the Department for Business, Energy and Industrial Strategy (BEIS), Coast-to-Capital, and transport providers including two airports, two marine ports and a bus company.
- 3.8 The Hydrogen Group is starting to make contact with regional groups in other parts of the UK and with hydrogen commercial organisations. The Group is somewhat unusual in being public sector led. At a previous meeting there was a presentation from Canterbury City Council which is working on a hydrogen production facility powered by the Thanet Wind Farm.
- 3.9 The Group has focused on identifying key components of a hydrogen economy in the region. It has looked in detail at the potential of hydrogen for heating and transport, at production and an overall strategy. In terms of production, the Sussex area is suitable for producing 'green' (very low carbon) hydrogen using renewable electricity.
- 3.10 Transport is the sector with the most immediate potential for transitioning to hydrogen, particularly heavy vehicles such as buses, refuse trucks, and emergency vehicles, that are less suited to electricity (battery) power than cars and other small vehicles. The Group is taking forward a key piece of research

with the University of Brighton, Ricardo and the Greater South East Energy Hub, to identify future demand for hydrogen for transport and potential locations for refuelling stations (including where these could be shared by different hydrogen users). This research will form part of the evidence base for a business case for refuelling stations and production of hydrogen.

- 3.11 The Hydrogen Group plans a soft rebrand and launch for the end of February 2021 (26 February most likely date) and invitations will be available soon.

4. ANALYSIS & CONSIDERATION OF ANY ALTERNATIVE OPTIONS

- 4.1 The Government has made clear that it sees economic recovery from Covid-19 as being driven by green growth, and the development of low-carbon energy solutions is a key strand in its thinking. The recently adopted Greater Brighton Energy and Water Plans and GB10 Pledges provide a firm foundation on which to build.
- 4.2 However, there is a need to be organised and ready for any announcements from Government. The proactive and forward-thinking work of the Hydrogen Group, including the ambition to create a Hydrogen Hub in the City Region, will ensure that the City Region is best placed to take advantage of these opportunities. A reactive or do-nothing approach would jeopardise the excellent work already done and potentially lead to future opportunities being missed.

5. COMMUNITY ENGAGEMENT & CONSULTATION

- 5.1 The group brings together a large number of Greater Brighton and other key stakeholders as outlined in paragraph 3.7. It is also starting to reach out to groups in other parts of the UK.

6. CONCLUSION

- 6.1 Greater Brighton is very much on the front foot to support the Government in achieving its green objectives through its ongoing work on the Greater Brighton Energy and Water Plans, Greater Brighton 10 pledges, and ambition to establish a Hydrogen Hub.
- 6.2 The work of the Hydrogen Group will ensure that plans are in progress to maximise these opportunities. Furthermore, at the current time it is crucial that the region is seizing the initiative to initiate, support and coordinate projects which will both help the environment and lead a sustainable economic recovery from the Covid-19 pandemic.

7. FINANCIAL & OTHER IMPLICATIONS:

Financial Implications:

- 7.1 There are no financial implications directly arising from this paper. The Greater Brighton Economic Board will support Greater Brighton Hydrogen Group in the event of future funding and grant bids.

Finance Officer Consulted: Rob Allen, Principal Accountant

Date: 15/01/2021

Legal Implications:

- 7.2 There are no legal implications directly arising from this paper.

Lawyer Consulted: Joanne Dunnyaglo, Senior Property Lawyer

Date: 15/01/2021

Equalities Implications:

- 7.2 There are no equalities implications directly arising from this paper.

Sustainability Implications

- 7.3 A gradual transition to hydrogen for power will help to cut carbon emissions and provide better air quality, thus having a positive impact on sustainability.

SUPPORTING DOCUMENTATION

Appendices:

None

Background Documents:

[Greater Brighton Energy Plan](#) (July 2020)

[Greater Brighton 10 Pledges](#) (October 2020)