

BRIDGEND COUNTY BOROUGH COUNCIL

REPORT TO CABINET

14 JUNE 2022

REPORT OF THE CORPORATE DIRECTOR - COMMUNITIES

BRIDGEND NET ZERO CARBON - HYDROGEN TECHNOLOGY DEMONSTRATOR

1. Purpose of report

- 1.1 The purpose of this report is to update Cabinet on discussions on the opportunity to develop a Hydrogen Demonstrator Project in Wales providing local green hydrogen that support decarbonisation of the Council's assets and the wider region.

2. Connection to corporate well-being objectives / other corporate priorities

- 2.1 This report assists in the achievement of the following corporate well-being objectives under the **Well-being of Future Generations (Wales) Act 2015**:-

- **Supporting a successful sustainable economy** – taking steps to make the county borough a great place to do business, for people to live, work, study, and visit, and to ensure that our schools are focussed on raising the skills, qualifications, and ambitions for all people in the county borough.
- **Helping people and communities to be healthier and more resilient** – taking steps to reduce or prevent people from becoming vulnerable or dependent on the Council and its services. Supporting individuals and communities to build resilience, and enable them to develop solutions to have active, healthy, and independent lives.
- **Smarter use of resources** – ensuring that all resources (financial, physical, ecological, human, and technological) are used as effectively and efficiently as possible and support the creation of resources throughout the community that can help deliver the Council's well-being objectives.

3. Background

- 3.1 In June 2020 Bridgend County Borough Council (BCBC) Cabinet approved a report that set out the crucial roles that BCBC must play through the management of its own resources and assets and the way in which it works with and supports residents, organisations, and businesses to respond to climate challenges.
- 3.2 BCBC's latest Corporate Plan highlights 'decarbonisation and environmental sustainability' as a priority area for the Council. Alongside this BCBC ensures that the climate is considered at an everyday decision-making level. This is underpinned by The Well-being of Future Generations (Wales) Act 2015 and the Bridgend Public Service Board Wellbeing Plan.
- 3.3 In March 2022 the Council published its draft Bridgend 2030 – Net Zero Carbon Strategy developed in line with the Welsh Public Sector Net Zero Carbon Reporting

Guide and extensive engagement with internal and external stakeholders. The Strategy commits to demonstrating leadership and commitment to deliver the Bridgend 2030 Net Zero Carbon Strategy, decarbonizing all its activities. The Draft Strategy will be subject to public consultation and then Cabinet approval of the finalise strategy will be sought in Autumn this year

- 3.4 The Decarbonisation 2030 Programme Board (“Programme Board”) oversees and tracks progress to Net Zero Carbon by 2030. The Programme Board is chaired by the Cabinet Member for Communities and led by the Corporate Director for the Communities Directorate.
- 3.5 It is recognised that the decarbonisation sector is developing rapidly. The sector is recognising the important role that the use of Hydrogen technology can play in both energy use and transportation. In 2021, Welsh Government were approached by the Japanese Consortium Marubeni, global specialist in renewables and hydrogen projects, to ask if they were interested in an investment opportunity for a Hydrogen Demonstrator Project in Wales. The Japanese Government’s New Energy and Industrial Technology Development Organisation (NEDO) has pledged some £13m to co-fund Hydrogen Power Demonstrators Projects with the Marubeni Corporation in the UK. The key to this project was the supply of Green Hydrogen power for heat and transportation using green energy sources. Bridgend was chosen as the most appropriate location and potential investment partner as it had an approved Local Area Energy Strategy and Heat Map developed, one of the first in Wales and it was also advanced in its work on a district heat network.
- 3.6 After considering other sites within the UK, including at Sheffield and Aberdeen, Bridgend County was selected by Marubeni as their chosen location to develop this NEDO Hydrogen Investment Project. Welsh Government having put Bridged forward for the initiative were pleased with this investment decision as it complements their Decarbonisation and Hydrogen ambitions and provides an opportunity to test new technologies. Similarly, it also provides a significant opportunity for BCBC to look to possibly decarbonise its corporate fleet and to look further at Hydrogen Energy applications. The project could also provide potential benefits for other Local Authorities in South Wales, in addition to public sector partners such as the South Wales Police and Welsh Ambulance Service.
- 3.7 In order to move the detailed development of this project forward, BCBC needs to work more formally alongside the Marubeni Corporation to develop the project with a shared understanding and the Marubeni Corporation haved asked that this understanding be documented in a non-binding Memorandum of Understanding (“MoU”). This provides a governance framework for operating within, prior to any binding contractual relationships being established. The unique components of the project, power, heat or fuel, the research and development benefits, to Bridgend and other public sector partners and financial and legal implications will be developed during this period to inform a later potential joint development agreement.

4. Current situation/proposal

- 4.1 The project will potentially bring a total of £26 million external investment funds into the borough through the NEDO (£13M) and Marubeni (£13M) that will develop a unique local energy and management system providing green low-cost energy and heat. The Cardiff Capital Region have in principle agreed to consider the opportunity

for investment on receipt of a detailed proposal and are engaged with the project. Welsh Government, having introduced the opportunity, are also keen to see the project to fruition and to support its development. South Wales police (our fleet management partner,) and other regional authorities could benefit from the assessment of hydrogen as a heavy fleet fuel and the heating potential for their assets. Bridgend therefore have the opportunity to demonstrate its leadership regionally in this green technology advancement.

- 4.2 In March 2022 Cabinet authorised the Corporate Director of Communities to undertake feasibility work, to engage specialist legal advice where required, utilising resources made available from the Communities Directorate Earmarked Reserve (EMR) 2020-21 for implementing Bridgend 2030 Decarbonisation Strategy at an initial anticipated value of £30,000, and to report back to Cabinet at a future date on the Project Details. This report addresses the next phase of this feasibility assessment and namely the correct governance structure to undertake this work in a clear and transparent manner, supported internally and externally with regional and Welsh Government partners.
- 4.3 A draft MoU which sets out a non legally binding commitment to cooperate in good faith and the framework under which BCBC and Marubeni Corporation will closely collaborate during any development stage. The MoU defines a working relationship and its limitations, to define the research, development, and potential implementation of the green hydrogen project mainly focusing on producing and off-taking green hydrogen to transport and heat applications in Bridgend. Supporting our:
 - i) decarbonisation of the vehicle fleet and heat networks in Bridgend,
 - ii) achievement of targets set out in the net zero strategy of BCBC, the region and Wales, and
 - iii) provision and expansion of public services in Bridgend.
- 4.4 The MoU also sets out the roles, responsibilities and limitations of the relationship to develop detailed proposals which may then lead to a joint development agreement, which would be subject of a further report to Cabinet. Initial legal advice has been provided and further advise will be commissioned as needed.
- 4.5 As with all agreements, confidentiality, termination and dispute resolution clauses are also included. The provisions in the MoU are non-binding and are not intended or construed to create any legal obligation on the Council or Marubeni at this stage.
- 4.6 The project's funding profile and viability will also be determined in this period. While Marubeni and NEDO funding provides the majority, BCBC are leading the negotiation and discussions with Welsh Government and Cardiff Capital Region for funding in Wales. This would be included in any future Joint Development agreement and subject to a further report to cabinet.
- 4.7 Revenue funding will also be required for supporting the implementation phase and the Council are seeking support from external bodies such as Welsh Government, and British Energy Industrial Strategy (BEIS) of central government, for heat network development, and may need to match-fund utilising the Communities Directorate Earmarked Reserve (EMR) 2022-23 for implementing Bridgend 2030 Decarbonisation Strategy, on a case-by-case basis.

4.8 In order to determine the technical, investment parameters, risks, carbon analysis and detailed benefits, to the Council, the region and Wales, a robust governance structure will be set up to oversee the progress of the MoU activities and required due diligence. This would comprise technical, legal and finance expertise alongside supporting input from officers of the Cardiff Capital Region and Welsh government. The Welsh Government Energy Services are also providing technical support to the project's development and due diligence.

4.9 Upon completion of this phase, a further report will be submitted to cabinet to consider the conclusions and for BCBC to decide whether to proceed to the next stage.

5. Effect upon policy framework and procedure rules

5.1 There is no effect upon the Council's Policy Framework or Procedure Rules as a result of this report.

6. Equality Act 2010 implications

6.1 An initial Equality Impact Assessment (EIA) screening has identified that there would be no negative impact on those with one or more of the protected characteristics, on socio-economic disadvantage or the use of the Welsh language. It is therefore not necessary to carry out a full EIA on this policy or proposal at this stage.

7. Well-being of Future Generations (Wales) Act 2015 implications

7.1 The Bridgend 2030 – Net Zero Carbon Strategy and its related projects including the Hydrogen Demonstrator Project, demonstrates the sustainable development principle by ensuring that by meeting the needs of the present they do not compromise the ability of future generations to meet their own needs. This is evidenced through the 5 ways of working as follows:

- **Long Term:** A Bridgend 2030 – Net Zero Carbon Strategy will provide the pathway for Bridgend County Borough to develop a decarbonised, digitally advanced transport, buildings power and heat systems and green space enhancements that meet the UK decarbonisation targets that are supported by BCBC's Local Area Energy Strategy and Smart Energy Plan and Green Infrastructure Plans and this Hydrogen Demonstrator Project.
- **Prevention:** A Bridgend 2030 – Net Zero Carbon Strategy - Hydrogen Demonstrator Project provides an opportunity for all to benefit from the decarbonisation transition and ensure that solutions are designed and available for Bridgend, the wider region and Wales.
- **Integration:** A Bridgend 2030 – Net Zero Carbon Strategy – Hydrogen Demonstrator Project offers an opportunity to develop a range of transport, buildings power and heat systems and green space enhancements options to communities, public and business partners offering carbon reductions, reduced fuel bills and create economic opportunities through a clearly identified value chain for the area.
- **Collaboration:** BCBC will continue to work in partnership with our communities, public sector partners and UK and Welsh Government and

private sector partners to deliver a Bridgend 2030 – Net Zero Carbon Strategy – Hydrogen Demonstrator Project.

- **Involvement:** Creating and delivering a Bridgend 2030 – Net Zero Carbon Strategy – Hydrogen Demonstrator Project, involves working with a variety of stakeholders, notably international investors, local public service partners, to jointly deliver sustainable solutions.

8. Financial implications

- 8.1 The resource challenge faced by all public bodies in Wales in their efforts to achieve net-zero carbon by 2030 is significant. Whilst the process for developing the Bridgend 2030 – Net Zero Carbon Strategy and its projects such as the Hydrogen Demonstrator Project, has been led by the Communities Directorate there has been a Council wide approach towards its creation and its delivery must be seen as a corporate responsibility. Delivery will also require an on-going partnership approach with key external stakeholders and a wide range of funders.
- 8.2 Much has been achieved by BCBC in securing external resources to date, often matched on a case-by-case basis with BCBC resources, for a number of the early phase actions being delivered to support the Council to reach net-zero carbon, such as the Bridgend District Heat Scheme, active travel and the Re:Fit scheme.
- 8.3 Like these schemes, many of the initiatives in future years will require feasibility funding to finalise their detailed cost and delivery profiles. Such funding is available on an annual basis via bids to BCBC's Corporate Feasibility Fund.
- 8.4 As initiatives that require additional resources are taken forward it is noted that the Corporate Director Communities, in consultation with the Corporate Director – Education and Family Support, Chief Officer – Legal and Regulatory Services, HR and Corporate Policy and Chief Officer – Finance, Performance and Change will submit proposals to secure external resources to fund 2030 initiatives through appropriate funds. As initiatives are developed, each one, including their potential resource requirements and carbon reduction potential, will be considered based on the information available at the time.
- 8.5 It is noted that, depending on fund criteria, an element of match funding may be required from BCBC. As the specific detail of individual funding packages are not yet known at this stage it is considered that any match funding requirement would be highlighted by the Corporate Director Communities, and the most appropriate source of match funding identified, which could require further reports to Cabinet and Council, particularly if capital match funding is required.
- 8.6 BCBC does not currently have a dedicated capital resource to deliver the 2030 programme in its entirety within its capital programme. The Council is facing a number of capital pressures which it needs to address, as outlined in the latest reports to Cabinet and Council on the capital programme, and if a specific ringfenced fund was to be created within the current Capital programme solely for decarbonisation then it may prevent other pressures being funded. There is however an EMR for 22-23 of £204K and this will be used for resourcing wherever possible.

9. Recommendation.

9.1 It is recommended that Cabinet:

9.1.1 Notes the progress to develop; Bridgend Net Zero Carbon – Hydrogen Demonstrator Project

9.1.2 Delegates authority to the Corporate Director of Communities, in consultation with the Chief Officer – Finance, Performance and Change and Chief Officer - Legal and Regulatory Services, Human Resources and Corporate Policy, to work with the Marubeni Corporation to develop the Hydrogen Demonstrator Project and to negotiate the terms of the MoU and enter into the document.

9.1.3 Delegates authority to the Corporate Director of Communities, in consultation with the Chief Officer – Finance, Performance and Change and Chief Officer - Legal and Regulatory Services, Human Resources and Corporate Policy, to commission specialist advice utilising resources that will be made available from the Communities Directorate Earmarked Reserve (EMR) 2022-23 for implementing Bridgend 2030 Decarbonisation Strategy from the Communities Directorate budget as required and to report back to Cabinet on the full project proposal.

9.1.4 Notes that a further report shall be received following the end of the MoU period to consider detailed viability of the project.

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Background documents

None