

**NORTH NORFOLK HYDROGEN STUDY**

**Executive Summary**

Increasing consideration is being given to the potential of the Bacton Energy Hub playing a major role in the UK's future energy security strategy as our national economy looks to transition to Net Zero, moving away from reliance on natural gas to sources of low carbon and renewable energy, including hydrogen and carbon capture and storage.

The District Council therefore needs to understand the implications and opportunities presented for the future of the Bacton Energy Hub site through commissioning some research into how hydrogen production and carbon capture and storage might be accommodated on the site and understand the potential benefits which might be realised for the North Norfolk economy through such investments in terms of jobs, training, supply chains etc.

This report therefore recommends that the District Council establishes a budget to commission a research report into the future opportunities for the Bacton Energy Hub site.

**Options considered**

Commission research into the future opportunities for the Bacton Energy Hub site so that the Council is able to take an informed and proactive position in engaging with investors proposing investments at the site to produce hydrogen and in the storage of carbon in depleted offshore gas fields in the southern North Sea.

Do nothing – not considered to be an appropriate position for the Council as potentially major proposals are developed for the Bacton Energy Hub site

**Consultation(s)**

The Council has held initial meetings with the North Sea Transition Authority, National Grid Gas Transmission, Cadent, and the Hydrogen Capital and Hydrogen Valley projects about the potential of future investments at the Bacton Energy Hub site.

However, these conversations are at a very early and formative stage and have not provided the Council with much information such that it can take an informed position of the opportunities and implications of such proposals for the Bacton site.

The Council therefore wishes to commission some initial, independent, research into these project proposals in order that it can, in due course, represent the interests of local communities and businesses in the further development of proposals made for the site.

**Recommendations**

Cabinet is recommended to establish an initial budget as detailed in the exempt appendix funded from the Corporate Plan Delivery Plan Reserve to commission a piece of

	independent research of the opportunities being proposed for the future of the Bacton Energy Hub site, particularly as a location for the production of hydrogen and the capture and storage of carbon, in order that the Council can take an informed position with respect to these significant proposals in support of the UK's Net Zero ambitions.
Reasons for recommendations	To position North Norfolk strongly in respect of developing proposals for the Bacton Energy Hub to make a significant contribution to the UK's Net Zero strategy and ambitions.
Background papers	<p><u><a href="#">North Sea Transition Authority (NSTA): Bacton Energy Hub - The move to &lt;br/&gt;net zero (nstauthority.co.uk)</a></u></p> <p><u><a href="#">North Sea Transition Authority (NSTA): Carbon Capture and Storage - The move to &lt;br/&gt;net zero (nstauthority.co.uk)</a></u></p> <p><u><a href="#">Capital Hydrogen</a></u></p> <p><u><a href="#">Hydrogen Valley</a></u></p>

Wards affected	Bacton, Trunch, Mundesley
Cabinet member(s)	<p>Cllr Tim Adams, Leader of the Council</p> <p>Cllr Adam Varley, Cabinet member for Net Zero and Climate Change</p> <p>Cllr Paul Heinrich, Cabinet Member for Sustainable Growth</p>
Contact Officer	<p>Steve Blatch, Chief Executive</p> <p>Tel: 01263 516232</p> <p>Email: <a href="mailto:steve.blatch@north-norfolk.gov.uk">steve.blatch@north-norfolk.gov.uk</a></p>

<b>Links to key documents:</b>	
Corporate Plan:	<p>Environment, Coast and Climate Change</p> <p>Sustainable Business Growth</p>
Medium Term Financial Strategy (MTFS)	None directly, but the Bacton Energy Hub site is one of the largest business rated premises in the District and so contributes to our business rate base
Council Policies & Strategies	<p>North Norfolk Local Plan</p> <p>Net Zero Strategy and Action Plan</p> <p>North Norfolk Coast Shoreline Management Plan</p>

<b>Corporate Governance:</b>	
Is this a key decision	No

Has the public interest test been applied	Part exempt (Paragraph 3 of Section 12A of the Local Government Act 1972) in terms of the budget to be established so as not to compromise procurement regulations in seeking prices / proposals for the research study.
Details of any previous decision(s) on this matter	None

## 1. Purpose of the report

- 1.1 The Bacton Gas Terminal has played an important part in the UK energy supply for over 50 years, initially processing gas from the southern North Sea for distribution through the UK gas transmission network, and in more recent times also handling gas from elsewhere in the North Sea and from the continent through a number of interconnector pipelines; to supply over one third of the UK's natural gas needs.
- 1.2 Looking to the future as the UK transitions away from fossil and carbon fuel sources towards Net Zero, the Bacton Gas Terminal site is increasingly being referred to as the Bacton Energy Hub - with the potential of the site being re-purposed for Carbon Capture and Storage and the production of hydrogen.
- 1.3 North Norfolk District Council currently has limited knowledge of these potential developments and what implications and opportunities they might have or present for local communities, the local environment and prospects of diversifying and positioning the local economy in an emerging economic sector with the potential for new skilled jobs, supply contracts etc. The authority therefore wishes to commission a piece of independent research as a baseline report from which it can consider how it should look to position itself to realise such opportunities in the future.
- 1.4 This report seeks authority to establish a budget to commission this research from which the Council will be able to agree a future position with respect to proposals at the Bacton Energy Hub over the next four years of this Council administration, when key decisions about the future of the Bacton site are likely to be made in support of the UK's Net Zero and Energy Security strategies.

## 2. Proposals and Options

- 2.1 In recent months the District Council, through the Chief Executive and previous Cabinet member for Sustainable Growth, has held initial conversations with the North Sea Transition Authority, National Grid Gas Transmission, Cadent, and the Hydrogen Capital and Hydrogen Valley projects about the potential of future investments at the Bacton Energy Hub site.
- 2.2 A number of these organisations – particularly the Capital Hydrogen and Hydrogen Valley proposals, have recently made public announcements proposing that the Bacton Energy Hub site could play a critical role in the production of hydrogen in large quantities to supply de-carbonisation

programmes of major industries in the Greater London and Midland regions as part of the UK's Net Zero and Energy Security strategies.

2.3 If the District Council is to engage with these proposals in an informed way it needs to develop its understanding of the proposals and what they might mean for the District's economy moving forward. At the present time the authority has limited technical knowledge of the industrial processes now being proposed for the Bacton site and yet potentially the site and district could play a significant role in the future development of the hydrogen and carbon capture and storage sectors in the UK over the next fifteen to twenty years.

2.4 It is therefore considered important that the Council obtains some independent advice as to the future growth scenarios of these emerging industrial / Net Zero sectors so that it can consider what resources it commits to supporting and engaging with these potentially exciting proposals moving forward.

### **3. Corporate Priorities**

3.1 These proposals relate directly to the Council's Corporate Plan objectives relating to the Environment, Climate and Coast and Sustainable Business Growth.

### **4. Financial and Resource Implications**

4.1 This report seeks authority to establish a budget to commission an independent research report outlining the anticipated growth of hydrogen production and demand, and the potential of carbon capture and storage proposals in the UK, and how some of these opportunities might be realised at the Bacton Energy Hub site in the district.

4.2 At this time, authority is sought to establish a budget as detailed in the exempt appendix to commission a research study which will require a modest staff resource in preparing the report specification, taking forward the procurement process and working with the appointed consultant in outlining the project brief and receiving the completed report. Receipt of the report, which will be presented back to Cabinet – most probably in September or October, might then outline a further resource requirement – financial or staff to take forward actions or recommendations. Any such decisions will be for a future meeting of Cabinet.

### **5. Legal Implications**

5.1 None at this time – beyond the financial regulations relating to the procurement / appointment of a contractor to undertake the study.

### **6. Risks**

6.1 None identified at this time.

## **7. Net Zero Target**

7.1 The commissioning and receipt of this research report will not, in itself, contribute to the Council's Net Zero Strategy & Action Plan; however given the subject matter the report could provide significant insight into how the Council could support the UK's move towards Net Zero through supporting future developments at the Bacton Energy Hub site.

## **8. Equality, Diversity & Inclusion**

8.1 Not a relevant consideration at this time.

## **9. Community Safety issues**

9.1 None at this time.

## **10. Conclusion and Recommendations**

**Cabinet is recommended to establish an initial budget, as detailed in the exempt appendix funded from the Corporate Plan Delivery Plan Reserve, to commission a piece of independent research of the opportunities being proposed for the future of the Bacton Energy Hub site, particularly as a location for the production of hydrogen and the capture and storage of carbon, in order that the Council can take an informed position with respect to these significant proposals in support of the UK's Net Zero ambitions.**