

Open Report on behalf of Andy Gutherson, Executive Director - Place	
Report to:	Environment and Economy Scrutiny Committee
Date:	25 October 2022
Subject:	Theddlethorpe Gas terminal: update

Summary:

This paper is the second update to the scrutiny committee on developments at Theddlethorpe Gas Terminal. Members will recall that the site is owned by National Grid, but its future use presents the opportunity for a major investment which could benefit the local area.

Nuclear Waste Services are exploring whether the site could be used as a geological disposal facility, Harbour Energy are pursuing carbon capture and storage options, and Neptune Energy had indicated that they were interested in the site for hydrogen production.

The paper shows that Nuclear Waste Services have now established a community partnership to explore the issue of geological disposal further and that Harbour Energy have progressed with their plans for carbon capture and storage.

The paper goes on to explain that LCC officers continue to liaise with government officials about the future of the site and the importance of supporting the local economy.

Actions Required:

Members of the Committee are invited to note the contents of this report.

1. Background

Geological disposal facility

At its meeting in November 2021 the Executive of the council agreed to three recommendations in a paper concerning a geological disposal facility. These were that the Executive:

- (1) approves acceptance by the Council of the invitation from Radioactive Waste Management (RWM) to join a Working Group to explore the potential for a geological disposal facility in eastern Lincolnshire;

- (2) approves the Council taking up membership of any subsequent Community Partnership that may be formed; and,
- (3) identifies a Councillor to represent the Council on the Working Group and, if it is formed, the Community Partnership. Councillor Martin Hill OBE was identified as the councillor to represent LCC.

The Environment and Economy scrutiny committee is asked to remember two critical points regarding Geological Disposal Facilities (GDF):

- Firstly - joining the working group does not mean that LCC supports the concept of a geological disposal facility
- Secondly – the working group is not where any decision about locating a geological disposal facility would be taken. It is the local community, through a Public Test of Support, who would determine whether a geological disposal facility should be located in the area.

LCC's involvement in a working group and subsequent community partnership has been concerned with communication of the facts relating to geological disposal facilities, their impact on the local community, and the investment that they may be able to lever.

The Community Partnership has now been formed, the interim chair is Jon Collins who chaired its predecessor, the working group. Cllr Martin Hill OBE is also a member of the community partnership.

The Community Partnership has produced a website with significant detail about geological disposal facilities ([Theddlethorpe GDF Community Partnership \(workinginpartnership.org.uk\)](http://Theddlethorpe_GDF_Community_Partnership_workinginpartnership.org.uk)) and which members of the committee are encouraged to explore. Nuclear Waste Services have held several engagement events with the local community and have produced newsletters which have been distributed to residents in the search area. The newsletter can be accessed via the website which is referred to previously. A Community Investment Fund which will provides an annual grant budget of £1m is now open for community groups, businesses, and schools to apply to.

The Theddlethorpe Residents Association has produced a questionnaire which was distributed to 576 properties in the village. 291 questionnaires were returned with 247 against the proposed geological disposal facility. 99 respondees had attended the Nuclear Waste Services engagement events and 158 had not.

As mentioned earlier in the report, one of the issues which LCC wishes to understand better -and which we are keen to ensure is communicated to others- relates to the economic impact of any geological disposal facility investment.

Nuclear Waste Services tell us that

“Constructing and operating a GDF is a multi-billion-pound major engineering and infrastructure project. It will generate many thousands of jobs and apprenticeships over its 100-plus year lifetime, both at the facility, in the wider supply chain, and by generating a

range of contract opportunities for businesses. A GDF will create at least 4,000 jobs over the next 25 years during the early stages of siting and initial construction. And we would aim to recruit many of the roles – such as construction, engineering, science – from the region local to the site chosen for a GDF.”

A generic report on the economic impact of geological disposal facilities is expected to be published by Nuclear Waste Services during September, and work is currently away on a more locally contextualised report too.

Other interests in Theddlethorpe Gas Terminal

Harbour Energy are part of a consortium which is pursuing a scheme called V Net Zero ([Homepage - V Net Zero \(vnetzerocluster.co.uk\)](http://vnetzerocluster.co.uk)) Harbour Energy have provided this information:

“The V Net Zero project plans to redevelop the former Theddlethorpe Gas Terminal with low-cost CO₂ transportation infrastructure linking the power and heavy industries of [northern] Lincolnshire and Humber to our offshore licenced CO₂ storage sites in the former Viking gas fields.

Theddlethorpe provides access to the former Lincolnshire Offshore Gas Gathering System (LOGGS), Harbour Energy’s legacy offshore pipeline to the Viking area, which is capable of being re-purposed as a secure CO₂ transportation route. Harbour plans to install a purpose-built onshore pipeline from Immingham, bringing CO₂ from multiple emitters to the Theddlethorpe site. The scheme targets storing 10 million tonnes per year of CO₂ by 2030, supported by an initial investment of £3bn across the capture, transportation, and storage projects.

Harbour Energy has materially invested in the development of the V Net Zero project from 2020, without UK Government grant support. Subject to inclusion of V Net Zero in Track 2 of the UK government’s sequencing of Carbon Capture and Storage projects, as well as clarity on the fiscal, regulatory and commercial framework, Harbour anticipates a final investment decision in 2024, with first CO₂ injection as early as 2027.

V Net Zero is ready to enter the Front End Engineering Design (FEED) project stage and looks forward to the launch of the Track 2 cluster sequencing process. Theddlethorpe will be a critical component; it offers access to existing key infrastructure and as a large brownfield site, offers an ideal location for the necessary process-engineering modules within a secure protected zone. The V Net Zero Theddlethorpe redevelopment opportunity avoids the need for greenfield development in a coastal and environmentally sensitive region.

The V Net Zero project has made material and at-pace development through 2022, including placing major engineering contracts for the design of the CO₂ transportation system and building on our award, in 2021, of the fourth Carbon Storage appraisal licence issued in the UK for the Viking fields. The V Net Zero onshore pipeline Development Consent Order is progressing towards submission in H1 2023. The first phase of non-statutory consultation with key stakeholders, at five venues along the proposed pipeline corridor, took place during

April 2022, supported by a digital consultation room open to the public from April through June 2022.

Following this consultation, the V Net Zero project has proposed a series of changes to the route corridor and will undertake a second consultation during September and October 2022, with letters and postcard invitations being issued in August. The V Net Zero onshore pipeline targets statutory consultation later in Q4 2022. V Net Zero has maintained regular dialogue with other known potential users of the Theddlethorpe site.

V Net Zero offers the prospect of material investment into Lincolnshire, throughout the 2020s and 2030s, both to decarbonise the vital Humber and [northern] Lincolnshire industries, and to preserve and create jobs with a secure energy grid based on decarbonised gas-fired generation. V Net Zero is working with project developers across [northern] Lincolnshire and South Humber bank to promote this material inward investment, into a diverse range of industrial, power, hydrogen and future port-enabled infrastructure.

The initial investment of £3bn is forecast to support or create approximately 6,000 jobs [in northern Lincolnshire and the Humber]. The Harbour team is working with local stakeholders to assess how to capture regional economic benefits. This collaboration has included commissioning new research from Lincoln University on the economic and social opportunities for low-carbon infrastructure, support to the CATCH UK Skills and Training centre and the Humber Industrial Cluster Plan. Harbour is committed to promoting equality, diversity and inclusion through a Science, Technology, Engineering and Maths (STEM) outreach programme for local higher and further education providers. The team recently attended the Humber Bizweek exhibition and is supporting educational engagement, working along with major industrial partners, for the skilled labour force this level of investment in decarbonisation will require.”

Finally, Neptune Energy are pursuing a scheme which combines carbon capture and storage with the production of blue hydrogen in a scheme called project DelpHYnus ([DelpHYnus project, UK North Sea | Neptune Energy](#)). It would appear that Neptune Energy have not been selected for a government licence to pursue the scheme at this stage, but they have stated publicly that they are now reviewing their options and that they remain committed to the scheme. Neptune Energy have confirmed this position in recent communication with council officials.

Impact and liaison with government

Each of the options that are currently being pursued for the site would require a licence from government -as may other options should they arise.

It is clear that if a development takes place at the site then there will be substantial job, supply chain, and infrastructure investment opportunities. In particular, if job opportunities of the scale that is being stated occur then there will need to be a substantial education, training, and recruitment programme which is focused on technical and engineering skills. It should be remembered that the options at Theddlethorpe are not the

only energy sector job creation taking place in and around Lincolnshire -there is a strong energy manufacturing sector in and around Lincoln, there are transformational levels of jobs proposed in the Humber energy cluster, and there are other major energy investment proposed in neighbouring counties. Currently the level of careers, education, and training in this context is probably not of the level to fill those jobs and officers are starting to explore what can be done to address this situation/opportunity.

The site of Theddlethorpe Gas Terminal is owned by National Grid, and major energy initiatives will often need a licence from government in order for them to be pursued. Therefore it is important that LCC builds a relationship with government officials as well as with potential developers.

LCC officers continue to liaise directly with officials from the Department for Business Energy and Industrial Strategy and we have joined Nuleaf, a local government special interest group which provides information about and access to government, regulators, and developers.

Midlands Engine has developed strategies around green energy and, working with Greater Lincolnshire Local Enterprise Partnership, we will shortly be joining a visit to greater Lincolnshire for representatives of the Midlands Engine green energy board. This visit will help to build a further relationship which will be useful to assist in communication with government, regulators, and developers in this sphere.

2. Conclusion

The developments at Theddlethorpe Gas Terminal are continuing to progress. The Community Partnership has now been formed which is providing information to the local community about the geological disposal facility option, and the carbon capture/storage option continues to progress too. One major issue for LCC to consider is the employment options that all options present, and how we support pupils, students, and the wider workforce to benefit from this opportunity.

3. Consultation

a) Risks and Impact Analysis

N/A

4. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

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