

Date 25 November 2019
Your Ref:
Our Ref: 13626



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Dear Mr Leigh

**OIL AND GAS CLIMATE INITIATIVE CLIMATE INVESTMENTS HOLDINGS LLP
NET ZERO TEESSIDE PROJECT, LAND AT REDCAR AND STOCKTON-ON-TEES, TEESSIDE**

REQUEST FOR A DIRECTION FROM THE SECRETARY OF STATE UNDER SECTION 35 'DIRECTIONS IN RELATION TO PROJECTS OF NATIONAL SIGNIFICANCE' OF THE PLANNING ACT 2008 FOR DEVELOPMENT TO BE TREATED AS DEVELOPMENT FOR WHICH DEVELOPMENT CONSENT IS REQUIRED

We write on behalf of the Oil and Gas Climate Initiative Climate Investments Holdings LLP (hereafter referred to as 'OGCI' or the 'Applicant').

OGCI requests that the Secretary of State ('SoS') for Business, Energy & Industrial Strategy ('BEIS') gives a direction under Section 35 'Directions in relation to projects of national significance' of the Planning Act 2008 (the 'PA 2008') for the relevant elements of the Net Zero Teesside Project, formerly known as the Teesside Cluster Carbon Capture and Usage Project (a carbon capture, utilisation and storage project) to be treated as development for which development consent is required.

Overview

OGCI is proposing to apply for development consent pursuant to Section 37 'Applications for orders granting development consent' of the PA 2008 from the SoS for BEIS to allow it to construct, operate and maintain the relevant elements of the Net Zero Teesside Project (the 'Project') on land at Redcar and Stockton-on-Tees on Teesside.

The Project would be the UK's first commercial scale, full chain carbon capture, utilisation and storage ('CCUS') project and would comprise a combined cycle gas turbine ('CCGT') generating station, including post-combustion carbon capture plant; gas, electricity and cooling water connections for the CCGT generating station; CO₂ pipeline connections from the CCGT generating station and industrial facilities on Teesside to transport the carbon dioxide (CO₂) captured; a

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gathering/booster station to receive the captured CO₂ from the pipeline connections; and a CO₂ pipeline for the onward transport of the CO₂ to an offshore geological storage site in the North Sea.

The proposed application for development consent would relate to the onshore elements of the Project (above Mean Low Water Springs) in addition to the offshore elements running under the tidal section of the River Tees. The remaining offshore elements, notably the subsea pipeline and offshore platform, would be subject to separate consent applications. The precise extent of the development comprised in this direction request is set out later in this letter.

OCGI therefore asks that the SoS treats this submission as a 'qualifying request' (as defined in Section 35ZA (11)) of the PA 2008 outlining, as required by that sub-section and sub-section 35ZA(1):

- the development to which the request relates;
- how the conditions in Section 35(2)(a) and (b) are met; and
- that no applications for consent or authorisations listed in Section 33 'Effect of requirement for development consent on other consent regimes' (1) or (2) have been made in relation to the development to which this request relates.

Compliance of this submission with Section 35ZA(1) and (11) is confirmed below.

The Applicant

OGCI comprises 13 companies from the oil and gas sector seeking to take practical actions on climate change. Members include BP, Chevron, CNPC, ENI, Equinor, ExxonMobil, OXY (Occidental Petroleum), PEMEX, BR Petrobras, Repsol, Saudi Aramco, Shell and Total.

OCGI has significant expertise in the field of CCUS, with 17 of the operational large-scale CCUS projects worldwide being operated by OGCI members. OGCI has earmarked over \$1 billion for accelerating the deployment of innovative low emissions technology. The Net Zero Teesside Project is one of OGCI's key investments.

Further information on OGCI can be found at: <https://oilandgasclimateinitiative.com/climate-investments/#ccus>

Background to the Net Zero Teesside Project

The Net Zero Teesside Project was initially developed as a concept by the Energy Technologies Institute ('ETI'). Independent evaluations and predictions for the UK consistently indicate that the most economic path to decarbonisation in the UK includes carbon capture and storage ('CCS') as part of the future energy mix. The Project was initially developed as a CCS enabled power project.

As the Project developed, potentially suitable sites were identified for its deployment and one main areas of focus was Teesside. This provided an additional opportunity to include potential for the capture and storage of several industrial sources of CO₂ as part of the Project, building on the industrial CCS work undertaken by the Teesside Collective. In addition, the 'Clean Growth Strategy - Leading the way to a low carbon future' published by the UK Government in 2017 (the Department for BEIS) identifies CCUS as a key part of the UK's decarbonisation strategy. As the UK Carbon Capture Usage and Storage Deployment Pathway Action Plan (2018) states, the UK Government:

"... are committed to the UK having the option to deploy CCUS at scale during the 2030s subject to the costs coming down sufficiently. To realise our ambition, our Action Plan is designed to enable the development of the first CCUS facility in the UK, commissioning from the mid-2020s."

More recently, the UK Government's commitment to achieve 'net zero' by 2050 in terms of greenhouse gas emissions has further underlined the importance of CCUS to decarbonising power generation and industry, with the Committee on Climate Change's May 2019 report identifying a need for gas-fired electricity generation with CCS in order to hit the 'net zero' 2050 target.

The Project therefore comprises the necessary infrastructure to capture both power generation and industrial sources of CO₂, for compression and transportation to offshore geological storage, supporting the aims of the Clean Growth Strategy and Government policy.

Project Description and Site

The Net Zero Teesside Project would be the UK's first, commercial scale, full chain CCUS project, having the potential to capture CO₂ from a number of power stations and industrial facilities on Teesside. CCUS is a proven technology and is already in use around the world.

The elements of the Project (which it is proposed would be the subject of the application for development consent, subject in part to receiving the direction now being sought) comprise the following:

- a CCGT generating station with an abated net electrical output of up to 2.1 gigawatts ('GW'), including carbon capture and compression plant (the plant would capture a nominal 90% of the CO₂ emitted by the generating station);
- a gas supply connection between the generating station and the National Transmission System ('NTS') for gas (for a supply of gas);
- a cooling water connection between the generating station and the River Tees (for the abstraction and discharge of cooling water);
- an electricity grid connection between the generating station and the National Grid (for the export of electricity);
- CO₂ pipeline connections from the CCGT generating station and industrial facilities on Teesside to transport the CO₂ captured;
- a gathering/booster station to receive the captured CO₂ from the pipeline connections; and
- a CO₂ transport pipeline for the onward transport of the captured CO₂ to a suitable offshore geological storage site in the North Sea.

As mentioned above, the Teesside Collective has previously been engaged in developing industrial CCUS solutions on Teesside. The Government's Clean Growth Strategy also includes CCUS as part of the strategy to decarbonise the power and industrial sectors. It is therefore proposed that the Project would enable industrial CO₂ emitters on Teesside to connect to the offshore CO₂ storage site. To facilitate this the Project includes a CO₂ gathering network (CO₂ pipelines to industrial facilities). This network would have a design capacity in the order of 6 to 10 million tonnes of CO₂ per annum that would feed into the gathering/booster station (along with CO₂ from the generating station) for subsequent transport to the offshore storage site.

Most of the Project Site lies within the administrative area of Redcar & Cleveland Borough Council, although the gas supply connection to the NTS and the CO₂ pipeline connections to the potential industrial sources would cross the River Tees into the administrative area of Stockton-on-Tees Borough Council. At this point the River Tees is tidal and therefore the section of the Project Site that passes underneath it is outside the jurisdiction of either Council and is part of the UK marine

area. **Figure 1** (attached to this letter) shows the current extent of the Project Site and the proposed DCO application site boundary edged in red. The Project Site extends to approximately 1,773 hectares.

Figure 2 shows the extent of the CO₂ infrastructure, including the CO₂ pipeline connection corridors, the gathering/booster station and the onshore section of the CO₂ transport pipeline for the onward transport of the captured CO₂ to a suitable offshore geological storage site in the North Sea. The gathering/booster station would be located on part of the former Sahaviriya Steel Industries UK Limited ('SSI') steel works site, east of the Redcar Bulk Terminal on the southern bank of the River Tees, close to the CO₂ transport pipeline landfall.

Figure 3 shows the two potential locations that are being considered for the CCGT generating station in addition to the associated cooling water, gas and electricity connection corridors.

A number of routes/corridors are currently being considered for the CO₂ pipelines and gas, water and electricity connections. These locations/corridors are the subject of on-going environmental and technical studies and it is envisaged that final routes/corridors would be selected in advance of an application for development consent being submitted.

Reasons for seeking a direction under Section 35

As confirmed above, the Applicant is proposing to apply for development consent from the SoS for BEIS to allow it to construct, operate and maintain the Net Zero Teesside Project on land at Redcar and Stockton-on-Tees on Teesside.

Section 14 'Nationally significant infrastructure projects: general' of the PA 2008 defines the types of development that constitute a 'nationally significant infrastructure project' (a 'NSIP') and therefore require development consent under Section 31 'When development consent is required'. In the field of energy these include generating stations, electric lines, underground gas storage facilities, LNG facilities, gas reception facilities, gas transporter pipelines and other types of pipelines.

The generating station element of the Project constitutes a NSIP in its own right under Section 15(2) 'Generating stations', as it will be an onshore electricity generating station in England with a capacity of more than 50 MW. The electricity grid connection to the National Grid may also represent a NSIP under Section 16 'Electric lines' as it may be in part an overhead electrical line in England with a nominal voltage of 132 kilovolts (kV) or more and a length of over 2 kilometres (km). The other elements of the Project (the gas and water connections and CO₂ infrastructure and pipelines), and any 'non-NSIP' part of the electrical connection, do not represent NSIPs in their own right as they do not meet any of the criteria or exceed any of the thresholds in the relevant sections of the PA 2008, including in particular those set out at Sections 20 'Gas transporter pipe-lines' or 21 'Other pipe-lines'.

Section 115 'Development for which development consent may be granted' of the PA 2008 confirms that development consent may be granted for both development for which development consent is required (i.e. a NSIP), and 'associated development'. Section 115(2) and (3) provide outline criteria for what can constitute 'associated development', which are complied with in relation to all elements of the Project (as no dwellings are proposed, and the development is all within the areas specified in Section 115(3)). In assessing whether the elements of the Project are 'associated development', it is also necessary to consider the terms of any relevant guidance.

The Department for Communities and Local Government (DCLG) has produced guidance on associated development (*'Guidance on associated development application for major infrastructure projects', April 2013*). Paragraph 5 sets out a number of core principles that the SoS should take into account in deciding whether or not development is associated development:

"(i) ... associated development ... requires a direct relationship between the associated development and the principal development. Associated development should therefore either support the construction or operation of the principal development or help address its impacts.

(ii) Associated development should not be an aim in itself but should be subordinate to the principal development.

(iii) Development should not be treated as associated development if it is only necessary as a source of additional revenue for the applicant, in order to cross-subsidise the cost of the principal development. This does not mean that the applicant cannot cross-subsidise, but if part of a proposal is only necessary as a means of cross-subsidising the principal development then that part should not be treated as associated development.

(iv) Associated development should be proportionate to the nature and scale of the principal development. However, this core principle should not be read as excluding associated infrastructure development (such as a network connection) that is on a larger scale than is necessary to serve the principal development if that associated infrastructure provides capacity that is likely to be required for another proposed major infrastructure project..."

Paragraph 6 of the DCLG guidance goes on to state that it is expected that associated development will, in most cases, be typical of development brought forward alongside the relevant type of principal development or of a kind that is usually necessary to support a particular type of project, for example (where consistent with the core principles above), a grid connection for a generating station.

The application for development consent is proposed to encompass all the onshore elements for the Project (including the offshore elements comprising the connection corridors under the tidal River Tees). The CCGT generating station represents the 'principal development' being a NSIP in its own right. In terms of what parts of the Project are associated development for the purposes of Section 115 of the PA 2008, it is considered that the gas and cooling water connections all clearly fall within this category, plus the electricity connection in the event that it is not a NSIP in its own right. Each of these connections would have a direct relationship with the principal development (the generating station) as each is required to support its operation. Furthermore, they are clearly subordinate to the generating station and are listed at Annex B to the DCLG guidance as examples of types of associated development specific to onshore generating stations. They are all also works that are typically brought forward with generating station developments.

In addition, the post-combustion carbon capture and compression plant adjacent to the generating station is considered to be associated development. As the generating station is being designed and promoted as one that would capture around 90% of the emitted CO₂ from day one (rather than being 'carbon capture ready'), the apparatus and development required to capture that CO₂ and compress it is a necessary part of the NSIP. There is direct relationship between this apparatus and the generating station, and it is required to achieve the generating station's intended operation. Consent applications for large scale carbon capture generating stations are rare, however, it is noted that the White Rose Carbon Capture and Storage Project's development consent application (the

only similar development consent application to date) was promoted on the basis that the related capture technology was associated development.

The Applicant considers that the position (in terms of what can be defined as associated development) is different with regard to the remaining CO₂ infrastructure for the Project, which includes the CO₂ gathering network (the CO₂ pipeline connections from the generating station and the industrial facilities), CO₂ gathering/booster station and the onshore section of the CO₂ transport pipeline for the onward transport of CO₂ to an offshore geological storage site in the North Sea. Section 14 of the PA 2008 does not specify carbon capture usage and storage infrastructure as being a type of infrastructure that is considered to be a NSIP within the Act. Furthermore, while pipelines are listed as being a type of infrastructure that can be a NSIP, as stated above, neither the CO₂ pipelines to the generating station or industrial facilities, or the onshore part of the CO₂ transport pipeline, meet the criteria for or exceed the thresholds set out at Sections 20 and 21 of the PA 2008.

Some parts of the CO₂ infrastructure (the CO₂ pipelines from the generating station and the gathering/booster station, that station, and the onshore section of the CO₂ transport pipeline to the offshore storage site) have a direct functional relationship with the NSIP. That function is to capture and compress the CO₂ created from the combustion of natural gas within the CCGT units; to receive this at the gathering/booster station; and then transport it via the CO₂ transport pipeline to the offshore storage site. This CO₂ infrastructure helps to address the impacts of the generating station (its CO₂ emissions), through the capture, transport and storage of the CO₂ that it would generate. The DCLG guidance recognises that associated development can be development that helps address the impacts of the principal development. However, the CO₂ infrastructure would not be solely designed or operated for purposes relating to the generating station, as it would also have a function and capacity relating to the CO₂ gathering network (the connections to industrial facilities on Teesside).

The CO₂ gathering network is not directly related to the NSIP, although it is an integral element of the Net Zero Teesside Project, as it would facilitate the connection of industrial sources of CO₂, support the operation of the Project and underpin its future commercial viability. Whilst the DCLG guidance recognises that associated development can be provided on a larger scale than is necessary to serve the principal development if that infrastructure provides capacity for other projects in the future, as would be the case here, it is not considered that this in itself is sufficient to ensure that this element can be promoted as associated development.

Given that there is a considerable degree of uncertainty regarding the status of some of the CO₂ infrastructure, which is not likely to be classified as associated development, the Applicant has decided to request that the SoS gives a direction under Section 35 to ensure that all the onshore elements of the Project (including the offshore elements comprising the connection corridors under the tidal River Tees) are treated as development for which development consent is required. In particular, the Applicant wishes to have certainty as to the relevant consenting regime for the Project given its national significance.

It is also likely that the Applicant would need to seek powers of compulsory acquisition in order to achieve the necessary level of certainty that the Project can be delivered, as a whole. A Section 35 direction would help to ensure that such powers can be sought and, if justified, granted as part of one consent.

This request for a direction pursuant to Section 35 of the PA 2008 therefore specifically relates to the following parts of the Project, with the other elements all comprising a NSIP or clearly being associated development:

- the CO₂ gathering network, including the CO₂ pipeline connections from the CCGT generating station and industrial facilities on Teesside to transport the CO₂ captured (including the connections under the tidal River Tees);
- the CO₂ gathering/booster station to receive the captured CO₂ from the gathering network; and
- the CO₂ transport pipeline for the onward transport of the captured CO₂ to a suitable offshore geological storage site in the North Sea.

The above elements are shown on Figure 2.

The Project does not include provision for any CO₂ capture or compression equipment that would be needed at any industrial facilities or other CO₂ emitters' sites, nor the local connections between their sites and the main gathering network. Consent for these elements would be obtained (most likely via the Town and Country Planning Act 1990) at the relevant time. The request for a direction therefore excludes these elements.

The Applicant has set out below how the Project satisfies the qualifying criteria to be considered under Section 35, why it is of national significance, and why it should be considered as a whole under the PA 2008 regime.

'Qualifying Request' under Section 35

Section 35(1) of the PA 2008 states that the SoS may give a direction for development to be treated as development for which development consent is required subject to the provisions set out in that section and also Section 35ZA. Those of relevance to the Net Zero Teesside Project are as follows:

- Section 35(2)(a)(i) – the development forms part of a project (or proposed project) in the field of energy, transport, water, waste water or waste.
- Section 35(2)(b) & (3)(a) – the development will (when completed) be wholly in England or waters adjacent to England up to the seaward limits of the territorial sea.
- Section 35(2)(c)(i) – the SoS thinks the project (or proposed project) is of national significance, either by itself or when considered with (in the case of paragraph (a)(i)) one or more other projects (or proposed projects) in the same field.

The Project would be a full chain CCUS project including a CCGT generating station. The Project therefore is within one of the qualifying infrastructure fields listed in Section 35(2)(a)(i). The PA 2008 does not define what constitutes the 'field of energy' but it is reasonable to conclude that this encompasses (at least) the types of infrastructure covered under 'Energy' at Sections 15 to 21 of the PA 2008.

The Project is wholly within England or adjacent waters up to the seaward limits of the territorial sea, meeting the criteria of Sections 35(2)(b) and 35(3)(a) of the PA 2008 (see Figure 1).

Section 35(2)(c) requires the project (subject of a request for a direction under Section 35) to be of national significance. As explained in detail below, the Project is of national significance. It would be

the UK's first commercial scale, full chain CCUS project and contribute to the delivery of the Government's Clean Growth Strategy and other policies by supporting the decarbonisation of the power and industrial sectors. The Project is particularly well located to support large-scale industrial decarbonisation, being in close proximity to a number of major energy intensive industrial facilities on Teesside.

Section 35ZA(1) states that the power in Section 35(1) to give a direction in a case within Section 35(2)(a)(i) (projects in the field of energy etc) is exercisable only in response to a qualifying request if no application for a consent or authorisation mentioned in Section 33(1) of (2) has been made in relation to the development to which the request relates.

The Applicant can confirm that no application for consent or authorisation mentioned in Section 33(1) or (2) has been made by it in relation to the elements of the Project to which this request relates.

Section 35ZA(11) defines a 'qualifying request' as meaning a written request for a direction under Section 35(1) that:

"(a) specifies the development to which it relates, and

(b) explains why the conditions in section 35(2)(a) and (b) are met in relation to the development;"

This request represents a 'qualifying request' as it is made in writing and specifies the development to which it relates (see 'Project Description and Site' above and Figures 1 to 3). Furthermore, as confirmed above, the conditions in Section 32(2)(a) and (b) are met.

National Significance of the Project

The Net Zero Teesside Project would be the UK's first commercial scale, full chain carbon capture, utilisation and storage project. The Project is of national significance given its size and scale and as it has the potential to make a significant contribution to decarbonising the UK's energy and industrial sectors building on the previous work of the Teesside Collective.

The Project would support the overarching objective of the Government to continue transitioning the UK to a low carbon economy. The role that CCUS technology has to play in achieving this transition is confirmed within a number of Government publications, including the 'National Infrastructure Plan' (HM Treasury, 2014), the Government's 'Clean Growth Strategy' (Department for BEIS, 2017) and 'Clean Growth - The UK Carbon Capture Usage and Storage deployment pathway - An Action Plan' (Department for BEIS, 2018) and most recently, the Government's commitment to achieve 'net zero' in terms of greenhouse gas emissions by 2050.

The above matters are considered below.

Size and scale of the Project

The Project not only encompasses a CCGT generating station with a net electrical output of up to 2.1 GW, but also post-combustion carbon capture plant, gas supply, cooling water and electricity connections, together with a CO₂ gathering network of pipelines to collect CO₂ from the generating station and industrial facilities on Teesside, a gathering/booster station for the CO₂ captured and a CO₂ transport pipeline for the onward transport of CO₂ to an offshore geological storage site. The engineering aspects of the Project, although well understood, are complex and involve a number of

different technologies. Indeed, it would be the first time that a full chain CCUS project has been constructed and operated at a commercial scale in the UK.

The Project Site, including the gas, cooling water and electricity connections and CO₂ pipeline corridors is substantial, extending to approximately 1,733 hectares. The various connections and CO₂ pipeline corridors are several kilometres in length, while the gas supply connection to the NTS and parts of the CO₂ gathering network would need to cross the River Tees (by means of an underground crossing). The Project Site also involves multiple land ownerships and lies within the administrative areas of both Redcar and Cleveland and Stockton-on-Tees Councils.

Further to the above, the Project would involve a major investment in Teesside in the region of £2 to £3 billion. The Project would therefore make a very significant contribution to Teesside's economy during both the construction phase and its operation. Direct and indirect jobs would be created and there would be significant supply chain opportunities for national, regional and local businesses.

The size and scale of the Project, combined with its complexity, cost and potential contribution to the economy, is considered to be such that it is clearly of national significance.

The National Infrastructure Plan (2014)

The National Infrastructure Plan was published by the previous government in 2014 (the 'NIP 14'). It builds upon the first NIP that was published in 2010. The NIP 14 sets out an ambitious vision for the UK's infrastructure, reinforcing the Government's commitment to investing in infrastructure and improving its quality and performance.

Chapter 1 of the NIP 14 sets out the Government's strategy for infrastructure. Paragraph 1.1 emphasises the strong case for infrastructure investment and that this has a significant positive effect on output, productivity, and growth rates, being a key driver for jobs throughout the economy. The Executive Summary highlights the economic benefits of infrastructure investment, including:

- For every £1 billion spent on infrastructure investment, 5,000 construction jobs could be supported as well as many more indirectly in design, engineering and planning.
- For every £1 spent on infrastructure construction there is an increase of £2.84 in overall economic activity.

Chapters 3 to 13 of the NIP 14 deal with different infrastructure sectors. Chapter 8 deals with 'Energy'. It reports on the progress made since 2010, with 20 GW of new electricity capacity created (enough for 23 million homes), much of it being low carbon or renewable. However, a key objective of the NIP 14 in terms of energy investment (paragraph 8.1) is to "*...reduce carbon emissions in order to mitigate climate change and meet legally binding targets.*"

Paragraph 8.3 states that large-scale investment in gas and low-carbon electricity generation is vital in order to replace ageing energy infrastructure, maintain secure energy supplies and meet legally binding environmental targets. Around £100 billion of investment is estimated to be required in electricity generation and networks by 2020. Paragraph 8.5 continues:

"As legacy coal, gas and nuclear power stations come offline, they will increasingly be replaced with a combination of renewable energy, new nuclear power and fossil fuel power stations fitted with Carbon Capture and Storage (CCS) technology. New gas plant is also needed as a vital backup for less flexible renewable generation and to ensure that the system can meet peak electricity demand.

Demand for gas to supply heat to homes and businesses will also remain significant for some time to come.” [our underlining]

The NIP 14 therefore recognises the continuing need for new gas-fired power stations to provide back-up to less flexible renewable generation. The provision of such infrastructure is critical to ensure that the National Grid can meet peak electricity demand as the amount of renewable generation increases. The clear inference though is that for fossil fuel power stations to remain part of the energy mix in the long-term they should be fitted with CCS technology if that can be shown to be commercially viable.

At paragraph 8.28 the NIP 14 sets out the Government’s Top 40 ‘Priority Investments’ to support its objectives for the energy sector. Alongside increased generation from renewables and new nuclear these include more electricity generation from gas and the deployment of carbon capture and storage.

The Project would contribute to the delivery of the NIP 14 and in particular the Government’s objectives for the energy sector through the deployment of a new gas-fired power stations that are fitted with CCS technology. The Project would assist with moves to decarbonise the power sector, while ensuring the security of electricity supplies and supporting the continued deployment of renewables.

The Clean Growth Strategy (2017)

The ‘Clean Growth Strategy - Leading the way to a low carbon future’, was published by the Department for BEIS in 2017. The Clean Growth Strategy (the ‘CGS’) sets out the aims of the Government to deliver increased economic growth while reducing carbon emissions. It estimates that the low carbon economy could grow 11% per year between 2015 and 2030, four times faster than the projected growth of the economy as a whole.

The Executive Summary (page 9) confirms that for the UK to achieve its fourth and fifth carbon budgets (2023-27 and 2028-2032) it will be necessary to drive a significant acceleration in the pace of decarbonisation. The Executive Summary sets out a number of key policies and proposals (pages 12-16) relating to ‘Improving Business and Industry Efficiency’. These include to:

“4. Publish joint industrial decarbonisation and energy efficiency action plans with seven of the most energy intensive industrial sectors;

5. Demonstrate international leadership in carbon capture usage and storage (CCUS), by collaborating with our global partners and investing up to £100 million in leading edge CCUS and industrial innovation to drive down costs.

6. Work in partnership with industry, through a new CCUS Council, to put us on a path to meet our ambition of having the option of deploying CCUS at scale in the UK, and to maximise its industrial opportunity.

7. Develop our strategic approach to greenhouse gas removal technologies, building on the Government’s programme of research and development and addressing the barriers to their long-term deployment.”

Chapter 3 (page 47) of the CGS sets out the Government’s approach and states:

“...we must create the best possible environment for the private sector to innovate and invest. Our approach will mirror that of our Industrial Strategy: building on the UK’s strengths ...; improving productivity across the UK; and ensuring we are the best place for innovators and new business to start up and grow. We are clear about the need to design competitive markets and smart regulation to support entrepreneurs and investors who will develop the new technologies at the scale we need.”

... we are laying the groundwork for major decisions in the areas where we face greatest uncertainty and challenge: in how we work with industry to make carbon capture, usage and storage (CCUS) a viable future option.”

Page 49 of the CGS goes on to state that:

“We want to use the power of Government to support innovation in a low carbon economy using all the tools available to us, including market design, taxation and regulation, as well as investment in our education systems, our science base and innovative companies. Our aim is to become one of the best places in the world for low carbon innovation.”

Chapter 3 of the CGS ‘Our Clean Growth Strategy’ sets out the various projects that have been announced as part of the ‘BEIS Energy Innovation Programme’ (page 50). This includes up to £20 million of investment in a carbon capture and utilisation demonstration programme.

A decision by the SoS for BEIS to give a direction under Section 35 of the PA 2008, to ensure that the Project in its entirety (the onshore elements, including the offshore elements below the tidal River Tees) is to be treated as development for which development consent is required, would accord with the Government’s approach set out above, in particular, removing uncertainty and working with industry to make CCUS a viable future option.

Chapter 4 of the CGS deals with different sectors of the UK economy. Pages 61-71 deal with ‘Improving Business and Industry Efficiency and Supporting Clean Growth’. Page 62 confirms that business and industry account for approximately 25% of the UK’s emissions and 50% of its electricity use.

This section of Chapter 4 sets out various policies and proposal to increase energy efficiency on business and industry. However, it is acknowledged (page 64) that energy intensive industries will require steps beyond energy efficiency:

“Out to 2030, this will require industry to make progress in switching from fossil fuel use to low carbon fuels such as sustainable biomass, in line with broader Government priorities in delivering on clean air, and clean electricity. Beyond 2030, this switching will need to substantially increase in scale and be coupled with the deployment of new technologies, for example, carbon capture, usage and storage (CCUS). Over the course of this Parliament, we will therefore also develop a framework to support the decarbonisation of heavy industry.”

Figure 17 ‘Carbon reduction opportunities across industry (2050)’ (page 65) confirms that the deep decarbonisation of industry will need to go beyond energy efficiency and highlights the significant contribution that CCUS could make toward decarbonisation.

Page 69 deals with CCUS in detail. Its states:

“There is a broad international consensus that carbon capture, usage and storage (CCUS) has a vital future role in reducing emissions. This could be across a wide range of activities such as producing

lower-emission power, decarbonising industry where fossil fuels are used and/or industrial processes as well as providing a decarbonised production method for hydrogen which can be used in heating and transport. This makes CCUS a potentially large global economic opportunity for the UK. The International Energy Agency estimates there will be a global CCUS market with over £100 billion – with even a modest share of this global market, UK GVA could increase between £5 billion and £9 billion per year by 2030.”

The Project would contribute to the achievement of the next two carbon budgets, and beyond. It would serve as a demonstration that CCUS can be delivered at a commercial scale in the UK in connection with both power generation and industry. Furthermore, it would have the potential to encourage further similar development in the future, thereby contributing to the wider decarbonisation of power generation and industry within the UK. The CGS (page 70) confirms that the Government will set up a new Ministerial-led CCUS Council with industry to review progress and priorities. Furthermore, that Government will continue to work with ongoing initiatives, including in locations such as Teesside, to test the potential for development of CCUS industrial carbonisation clusters. It goes on to state (page 71) that:

“The Government will spend up to £100 million from the BEIS Energy Innovation Programme to support Industry and CCUS innovation and deployment in the UK including £20 million of funding available for a carbon capture and utilisation demonstration programme to invest in new innovative technologies that capture and utilise carbon dioxide.”

Pages 93 - 101 of Chapter 4 cover ‘Delivering Clean, Smart, Flexible Power’. The overriding objective is to deliver a reduction in emissions from the power sector. Page 96 states that in order to achieve this it will be necessary to continue to bring down the costs of low carbon generation from renewables and nuclear and ensure that the UK can deploy CCUS at scale during the 2030s. Page 101 reiterates that Government’s commitment to supporting CCUS innovation and deployment through the BEIS Energy Innovation Programme.

The Project would clearly contribute to the delivery of the CGS in terms of the Government’s objective to decarbonise both the industrial and energy sectors. The Project is particularly well located to support industrial decarbonisation given the concentration of major energy intensive industrial operations on Teesside.

Clean Growth – The UK Carbon Capture Usage and Storage deployment pathway - An Action Plan (2018)

‘Clean Growth – The UK Carbon Capture Usage and Storage deployment pathway - An Action Plan’ (the ‘Action Plan’) was published by the Government in 2018. The Executive Summary (pages 5 and 6) confirms that the Government’s vision is for the UK to become a global leader in CCUS. The Action Plan is aimed at enabling the development of the first CCUS facility in the UK, with commissioning in the mid-2020s, which would support the ambition of being able to deploy CCUS at scale during the 2030s, subject to the costs coming down sufficiently. It goes on to state (page 6):

“Through our Clean Growth Strategy we re-affirmed our commitment to the domestic deployment of CCUS subject to cost reductions. This Plan sets out our next steps to progress this commitment.”

The Action Plan goes on to state that this can only be achieved through close Government and Industry partnership (page 14). CCUS is thought to be central to a least cost energy system decarbonisation pathway to 2050. The Committee on Climate Change (‘CCC’) stresses the importance of CCUS to *“achieving at lowest cost, as well as its crucial role in enabling deeper*

emissions reduction beyond that". Modelling by the Energy Systems Catapult ('ESC') for the Energy Technologies Institute ('ETI') supports the conclusion by the CCC that energy system decarbonisation could be up to 50% cheaper by 2050 if CCUS is deployed at scale, and conclude that delaying deployment beyond the 2020s will increase the risks of decarbonising the UK's energy system. Both the CCC and ETI analysis concludes that initial deployment is required during the 2020s in order to have the option of deploying at scale during the 2030s, and in particular to keep open the option of UK CCUS deployment towards the levels both state are required in 2050. This timeline was endorsed by the CCUS Cost Challenge Taskforce, and the conclusion was also reached by the Parliamentary Advisory Group on CCS7. A key message from all these independent bodies is that deployment of CCUS during the 2020s is essential to unlock the greatest opportunities for cost reduction.

Teesside, with its chemicals focused industrial centre and access to North Sea storage, is identified as one of the key potential locations for CCUS (page 16), building on the work undertaken to date by the Teesside Collective. At page 27 (Delivering our 2030s ambition) reference is made to industrial centres such as Teesside seeing CCUS as central to their long-term competitiveness.

At page 32 (Industrial decarbonisation with CCUS) the Action Plan highlights the importance of CCUS in decarbonising energy intensive industries ('EIs'), including iron and steel, cement, chemicals, and oil refining. It goes on to state:

"Some of these industries produce volumes of emissions from chemical processes, in addition to combustion of fossil fuels, for example, up to 70% of emissions from cement production are from the process of producing cement, rather than from energy use. These emissions cannot be abated by fuel switching or electrification.

Overall, CCUS could provide 37% of the total abatement potential in EIs by 2050. A recent study by McKinsey on decarbonising EIs showed that where carbon dioxide storage sites are accessible, CCUS is the lowest-cost decarbonisation option at current commodity prices. CCUS also enables the large-scale use of hydrogen as an industrial fuel, which the recent CCC and Element Energy reports have indicated could be one cost-effective pathway to industrial decarbonisation."

The Action Plan (pages 35 to 37) also highlights the role of CCUS in decarbonising electricity generation, alongside an expansion of other forms of low and zero-carbon power generation to achieve 'deep decarbonisation' of the UK power sector.

The Project is consistent with the vision and ambition of the Action Plan. Furthermore, Teesside, with its concentrations of industry, particularly within the chemicals sector, is identified as a potential key location for the deployment of CCUS at scale.

'Net Zero' by 2050 (June 2019)

On 27 June 2019, the 'Climate Change Act 2008 (2050 Target Amendment) Order 2019' came into force. The Order enshrines within UK law, the Government's commitment to achieve 'net zero' in terms of greenhouse gas emissions by 2050. The order amends the previous target (within the Climate Change Act 2008) which was seeking achievement of a reduction in greenhouse gas emissions of 80% by 2050 compared to 1990 levels.

The commitment to achieve 'net zero' by 2050 is in line with the recommendations of the Committee for Climate Change ('CCC') set out in its recent report (May 2019) 'Net Zero – The UK's Contribution to Stopping Global Warming'. The report is clear that if this target is to be achieved greenhouse gas emissions will need to be offset by schemes that are capable of taking away large

amounts of emission from the atmosphere. CCUS is identified as having a key role to play in mitigating greenhouse gas emissions.

The executive summary to the CCC report (page 12) states that the net zero target cannot be met simply by adding mass removal of CO₂ on to existing plans for the previous target of an 80% reduction by 2050 compared to 1990 levels. It highlights that CCUS is crucial to the delivery of zero greenhouse gas emissions and that it is of strategic importance to the economy. However, it raises concern that CCUS has barely started in the UK - of the 43 large-scale projects operating in the World, none are in the UK.

The report states that the remaining greenhouse gas emissions in the UK must be offset by removing CO₂ and permanently sequestering it through technologies such as CCUS. The important role of CCUS is also stressed in terms of capturing the CO₂ from the production of hydrogen (given the ambition to move to a hydrogen economy that is seen as critical to achieving net zero) and from non-renewable electricity production (page 23). CCUS is seen as a necessity not an option.

Need for the PA 2008 regime

The Net Zero Teesside Project is complex; the onshore elements comprise a CCGT generating station and gas supply, cooling water and electricity connections, post-combustion carbon capture and compression plant, a CO₂ gathering network of pipelines, a CO₂ gathering/booster station and a CO₂ transport pipeline for the onward transport of CO₂ to an offshore geological storage site in the North Sea. The Project involves crossing the River Tees and land within the administrative areas of two local authorities. The Project Site also encompasses a number of land ownerships with the likelihood of numerous land and access rights being required to deliver it. In addition, the Project Site includes or crosses a significant range of existing infrastructure and apparatus.

As outlined above, it is considered that there is considerable uncertainty as to whether all of the CO₂ infrastructure can be classified as associated development, for which development consent could be granted. If it is not possible to advance the Project in its entirety through the PA 2008 regime, it would be necessary to submit a development consent application for the CCGT generating station and the parts of the Project that can be considered to be associated development, and to seek separate planning permission for the other parts (e.g. the CO₂ infrastructure) under the Town and Country Planning Act 1990. It is also likely that planning applications would need to be submitted to both Redcar & Cleveland and Stockton-on-Tees Councils. A separate application may also be required for a marine licence from the Marine Management Organisation for the part of the CO₂ transport pipeline and water abstraction/discharge apparatus in the UK marine area.

The above scenario would require OCGI to obtain a number of consents with differing timescales and involving multiple consenting bodies. The Project would have to be assessed against different policy frameworks, rather than primarily against the National Policy Statements, while the time frames associated with obtaining these consents are less certain when compared to those for development consent. Furthermore, it could be more difficult to obtain powers of compulsory acquisition (if required) in relation to the parts of the Project out with the development consent application boundary. Such powers are likely to be needed to deliver the Project given the multiple landownerships involved. A fragmented approach to consenting would also introduce uncertainty and risk to the Project, such that policy makers and investors would not see it as fulfilling the aims of the Clean Growth Strategy and Government policy; this is likely to affect the delivery and overall viability of the Project.

In addition to the above, the need to obtain a number of consents would place a greater burden upon the consenting bodies, notably the local planning authorities, who would have to both engage in the development consent process while administering and determining separate applications for planning permission.

The PA 2008 regime was introduced to expedite the delivery of complex, nationally significant projects, such as the Net Zero Teesside Project. If a direction is given by the SoS that all of the relevant elements of the Project (including the offshore elements beneath the tidal River Tees) are development for which development consent is required, this would assist the Applicant in delivering it in a more timely manner, which would support the delivery of the Government's Clean Growth Strategy and its 'net zero' 2050 target.

Summary

The Applicant is seeking a direction from the SoS under Section 35 of the PA 2008 to ensure that all of the relevant elements of the Net Zero Teesside Project are development for which development consent is required. Such a direction would provide the Applicant with certainty as to the inclusion of all the CO₂ infrastructure within any application for development consent that is submitted. It would avoid the need for the Applicant to obtain a number of consents with differing timescales and involving multiple consenting bodies. It would provide certainty in terms of the timing of decision-making and also provide scope for the Applicant to seek powers of compulsory acquisition (if required), which may be required in order to deliver the Project.

This letter represents a 'Qualifying Request' under Section 35. The Net Zero Teesside Project is within the field of energy and (when completed) would be wholly within England and the adjacent marine area. The Project is also of national significance by virtue of its size, scale and complexity and in terms of how it would support important Government objectives for decarbonising the power and industrial sectors as set out in the National Infrastructure Plan 2014, the Clean Growth Strategy 2017 and the UK Carbon Capture Usage and Storage deployment pathway - An Action Plan 2018. It would also support the Government's target (enshrined in law) of achieving 'net zero' in terms of greenhouse gas emissions by 2050.

I look forward to receiving confirmation that this request has been received. In the meantime, please do not hesitate to contact me if you require any further information.

Yours sincerely



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Encs: Figures 1 to 3