

### 3.0 THE NEED FOR THE SCHEME

#### 3.1 Introduction

3.1.1 The Energy White Paper (published in May 2007) recognises that the planning process is one of the most significant barriers to the deployment of renewable energy technology within the UK. In light of this, the UK Government is proposing a number of reforms to the planning system. One of the key reforms in the context of this section of the Environmental Statement is that applicants will no longer have to demonstrate the overall need for renewable energy. In recognising the urgent need to bring such development forward, and the difficulties in securing planning permission for this type of development, the White Paper states (paragraph 5.3.67):

*“Applicants will no longer have to demonstrate either the overall need for renewable energy or for their proposal to be sited in a particular location”*

3.1.2 This approach is re-confirmed in the Planning Policy Statement: Planning and Climate Change Supplement to Planning Policy 1, published in December 2007. The Supplement provides key policies on renewables and the Glossary to the document explicitly identifies that renewable and / or low carbon energy supplies include biomass fuelled energy facilities. Thus, a biomass fuelled renewable energy plant is part of the renewable and / or low carbon supply system.

3.1.3 The White Paper’s approach to renewable and / or low carbon energy is outlined in paragraph 20 of the PPS1 Supplement. In addition, paragraph 40 encourages planning authorities to be facilitative in their handling of planning applications that meet the objectives of the Supplement:

*20. In particular, planning authorities should:  
not require applicants for energy development to demonstrate either the overall need for renewable energy and its distribution, nor question the energy justification for why a proposal for such development must be sited in a particular location.*

*40. An applicant for planning permission to develop a proposal that will contribute to the delivery of the Key Planning Objectives set out in this PPS should expect expeditious and sympathetic handling of the planning application.*

- 3.1.4 The Energy White Paper supports the proposed reforms to the planning system with a statement of need for renewables. This states:

*“BOX 5.3.3 RENEWABLES STATEMENT OF NEED*

*We remain committed to the important role renewables has to play in helping the UK meet its energy policy goals. In this publication we are reiterating previous commitments we have made, not least in the 2003 Energy White Paper and Planning Policy Statement 22 on renewable energy (PPS22), on the importance of renewable generation and the supporting infrastructure. We intend this to reconfirm the UK Government policy context for planning and consent decisions on renewable generation projects.*

*As highlighted in the July 2006 Energy Review Report 150, the UK faces difficult challenges in meeting its energy policy goals. Renewable energy as a source of low carbon, indigenous electricity generation is central to reducing emissions and maintaining the reliability of our energy supplies at a time when our indigenous reserves of fossil fuels are declining more rapidly than expected. A regulatory environment that enables the development of appropriately sited renewable projects, and allows the UK to realise its extensive renewable resources, is vital if we are to make real progress towards our challenging goals.*

*New renewable projects may not always appear to convey any particular local benefit, but they provide crucial national benefits. Individual renewable projects are part of a growing proportion of low carbon generation that provides benefits shared by all communities both through reduced emissions and more diverse supplies of energy, which helps the reliability of our supplies. This factor is a material consideration to which all participants in the planning system should give significant weight when considering renewable proposals. These wider benefits are not always immediately visible to the specific locality in which the project is sited. However, the benefits to society and the wider economy as a whole are significant and this must be reflected in*

*the weight given to these considerations by decision makers in reaching their decisions.*

*If we are to maintain a rigorous planning system that does not disincentivise investment in renewable generation, it must also enable decisions to be taken in reasonable time. Decision makers should ensure that planning applications for renewable energy developments are dealt with expeditiously while addressing the relevant issues.”*

- 3.1.5 In light of the above, it can be concluded that renewable energy policy and strategy are unequivocal in stating that it is not necessary to demonstrate need as part of this planning application. Notwithstanding this, for completeness (and in order to highlight a material planning consideration to which considerable weight should be attached), Eco2 has elected to provide an overview of the need for the Brigg REP development. Accordingly, this section summarises the need for the development from a national, regional and local policy / strategy perspective.

### **3.2 Need from a Policy / Strategy Perspective**

- 3.2.1 Need is, in many instances, closely related to planning policy and strategy, the detailed appraisal of which is contained within Section 5.0 of this ES. By necessity, the appraisal of need will overlap with the full planning assessment and has been informed by it. Consequently, rather than repeating many of the issues which are addressed in detail in Section 5.0, this sub-section only provides a summary of the key issues. However, it does provide a greater focus upon the relevant national, regional and sub-regional targets for renewable energy provision.
- 3.2.2 The need for the Brigg REP from a policy / strategy perspective can be summarised as follows.

#### ***National Policy / Strategy (Energy White Paper May 2007 and the UK Biomass Strategy May 2007)***

- 3.2.3 The national need for renewable energy facilities is set out within the aforementioned extract from the Energy White Paper. However, there are a

number of other points contained within the White Paper, UK Biomass Strategy and the UK Renewable Energy Strategy Consultation Document that further support the need for the Brigg REP development. These are summarised below.

### *Energy White Paper*

3.2.4 The Energy White Paper – ‘Meeting the Energy Challenge’ was published on 23 May 2007 and represents the most up to date national strategy in respect of renewable energy. The salient issues and targets are summarised below:

- the Government has set a target to see renewables grow as a proportion of our electricity supplies to 10% by 2010, 15% by 2015, with an aspiration for this level to increase to 20% by 2020. The White Paper indicates that in 2006 electricity supplied from renewable sources stood at around 4% of the UK’s total. Therefore, it is clear that if the Government’s targets are to be achieved significant levels of renewable energy provision will have to come forward. The proposed facility would contribute towards this requirement.
- the Government indicates that increasing the amount of electricity generated by renewables would make a significant contribution towards its long-term aim of reducing CO<sub>2</sub> emissions by 60% by 2050. As renewable energy technologies produce very little carbon dioxide and other greenhouse gases, they play an important part in tackling climate change. The Brigg REP is expected to contribute to the achievement of this objective as it would save approximately 250,000 tonnes of CO<sub>2</sub> per annum compared with the same level of electricity generation from coal.
- achieving the 20% renewables aspiration would reduce the UK’s current dependence on imported fossil fuels.
- The White Paper also proposes changes to the Renewables Obligation (RO). The existing RO regime requires power suppliers to derive from renewables a specified proportion of the electricity they supply to their customers. This started at 3% in 2003, rising gradually to 10.4% by 2010, and 15.4% by 2015. Eligible renewable generators receive Renewables Obligation Certificates (ROCs) for each megawatt hour (MWh) of renewable electricity they generate. These are sold to electricity suppliers, allowing them to demonstrate how much renewable

generation they have sourced. Suppliers can either present sufficient certificates to cover the required percentage of their output, or they can pay a 'buyout' price for any shortfall. The buy-out price is the fixed penalty that an energy supplier pays for each MWh that it falls short of its obligation. The buy-out price is linked to the Retail Price Index (RPI) and for 2008/09 the price is £35.76 per MWh. The suppliers pay this money into an account administered by Ofgem (the Buy-out Fund) and each year the accumulated Fund is shared among those suppliers who have presented RO Certificates (ROCs). The combination of the buy-out price and the extent to which suppliers have fallen short of their obligations determines the nominal value of a ROC and the total support available for each MWh of renewable electricity under the RO. When the Obligation as a percentage of total electricity supplied is greater than the share of actual renewable generation, the value of a ROC will be by definition greater than the buy-out price. One of the most significant changes promoted within the White Paper is to 'band' the obligation to differentiate levels of support for certain types of renewable technologies. The introduction of banding means that technologies could be awarded more or less than one ROC for each MWh of electricity they produce, depending upon the stage of the technology development and associated costs. The aims of this are to bring forward a variety of renewable technologies, increase their deployment and improve the overall effectiveness of the RO.

### *The UK Biomass Strategy*

3.2.5 The UK Biomass Strategy was published in May 2007. The key issues and targets contained within the document are summarised below:

- the Government's strategy for biomass is to "realise a major expansion in the supply and use of biomass in the UK".
- the Biomass Strategy acknowledges the importance of energy generated from biomass in tackling climate change and notes that biomass will have a central role to play in meeting the Government's target of 20% renewable energy by 2020, both through co-firing and the use of dedicated biomass energy facilities (such as that proposed at Brigg);

- the strategy sets out a number of principles aimed at securing a sustainable increase in UK biomass production, one of which is to *“encourage local planning authorities to put in place policies to promote and encourage the development of renewable resources (which includes energy from biomass) through the planning system..”*;
- Appendix A of the Strategy contains a table which specifically considers the potential supply of biomass in the UK. It indicates that there are some 3 million tonnes per annum of cereal straw (the main fuel which is to be used by the Brigg REP) available within the UK for energy generation, it indicates that this could generate the equivalent energy of 1.1 million tonnes of oil and has the potential to generate approximately 3,500 – 4,000 gigawatt hours of electricity (GWhe). The supporting text to the table contained within Appendix A is also of significance: this indicates that the 3 million tonnes of surplus straw is available in the eastern counties of England without disrupting its existing use for livestock or as a fertiliser.

*The UK Renewable Energy Strategy Consultation Document Executive Summary*

3.2.6 The UK Renewable Energy Strategy Consultation Document was published by The Department for Business Enterprise and Regulatory Reform (BERR) in June 2008. The purpose of the Strategy is to provide a range of measures to deliver the UK’s share of the EU target to increase the share of renewables in our energy mix from 1.5% in 2006 to 15% by 2020. The most relevant extracts are:

- *“Investment in more renewable energy in the UK, alongside other low carbon sources such as nuclear power and carbon capture and storage, can contribute to a more diverse mix of technologies and lower levels of fossil fuel imports. Our Renewable Energy Strategy (RES) can make an important contribution to this – we estimate that increased investment in renewables in the UK to meet a 15% renewable energy target in 2020 will reduce UK gas imports by 11-14% in 2020.”* (Paragraph 4);
- *“To meet the EU Renewable Energy target, we will need a far-reaching new strategy to increase the contribution of renewable sources in the*

*three main energy-consuming sectors – electricity, heat and transport.”*  
(Paragraph 12);

- *“As outlined above, if we are to meet our 2020 goal, up to 30-35% of our electricity may need to come from renewable sources. Today that figure is less than 5%, made up mostly of biomass, hydro and wind”*  
(Paragraph 30);
- *“Currently, biomass accounts for about 2.3% of our electricity generation and for less than 1% of our heat needs. To meet our share of the EU 2020 renewable energy target our analysis suggests that biomass-fuelled technologies, including biogas, may need to provide around 30% of the UK’s renewable electricity and heat generation. An increase on this scale means we will have to make the best possible use of UK-produced biomass resource”* (Paragraph 62).

3.2.7 It is clear from the above (and the ‘renewables statement of need’ contained within the introduction), that there is a significant need for additional renewable energy facilities nationally. It is also apparent that energy generated from biomass will be central to the achievement of the Government’s renewable energy targets.

***Regional Policy (The Regional Energy Infrastructure Strategy, The Regional Spatial Strategy for Yorkshire and the Humber to 2026 (adopted May 2008)***

3.2.8 The Yorkshire and Humber Regional Energy Infrastructure Strategy was published by the Regional Energy Forum (REF) in February 2007 and provides a framework (page 4) for the achievement of three Key Objectives which are supported by a number of Key Actions:

- Objective 1: Lead the way in delivering secure regional and national energy supplies.
  - Key Action 1.1: Deliver the development of a diverse energy portfolio for the region.
  - Key Action 1.2: Reinforce the energy supply chain and grid infrastructure to enable both centralised and distributed generation.
  - Key Action 1.3: Facilitate skills growth in the energy sector and energy technology areas.

- Objective 2: Promote the reduction in energy demand through efficiency in supply and transmission.
    - Key Action 2.1: Identify opportunities for increased energy efficiency in generation and transmission.
    - Key Action 2.2: Identify opportunities for capturing waste heat and for new combined heat and power schemes.
  - Objective 3: Maximise low carbon energy generation.
    - Key Action 3.1: Reduce greenhouse gas emissions.
    - Key Action 3.2: Progress the region's targets for energy generated from renewable sources and promote microgeneration;
    - Key Action 3.3: Facilitate the development of bioenergy production in the region.
- 3.2.9 In order to meet the above actions the REF specifically supports a number of developments such as “an extensive regional bioenergy infrastructure that includes the widespread production and use of biomass and biofuels” and “prevalence of combined heat and power (CHP) and community energy schemes in urban and renewable programmes”.
- 3.2.10 It is evident from the above that the Regional Energy Infrastructure Strategy recognises that there is a significant need to increase renewable energy generation and it specifically promotes the development of biomass and the provision of CHP. The Brigg REP would contribute the achievement of the relevant objectives and aims set out within the Strategy.
- The Yorkshire and Humber Plan: Regional Spatial Strategy to 2026 (May 2008)*
- 3.2.11 The recently adopted (May 2008) Regional Spatial Strategy (RSS) for Yorkshire and Humber provides targets for installed renewable energy generation in Policy ENV5. For the Region the minimum target is to have 708MW by 2010 and 1,862MW by 2021 of grid installed renewable energy generation. For the Humber sub-region the minimum target is 124MW by 2010 and 350MW by 2021.

- 3.2.12 Policy ENV5 of the draft RSS further breaks down the allocation of installed renewable energy targets, for which the North-Lincolnshire target is 54MW by 2010 and 112MW by 2020.
- 3.2.13 The Brigg REP would be capable of producing (at full capacity) 40MW continuous output, exporting some 300,000MWh per annum of green energy to the electrical supply network. Though the development would not be operational in time to meet the 2010 targets, it would make a significant contribution to the achievement of the 2021 targets set out within both RSS. Indeed, the Brigg REP alone would meet over a third of the target of installed renewable energy generation by 2020 for North-Lincolnshire.

### ***Local (North Lincolnshire Local Plan)***

- 3.2.14 The saved policies contained within the North Lincolnshire Local Plan do not set any specific targets for renewable energy provision. However, support for renewable energy is inherent within the Plan. Policy DS21 (Renewable Energy) indicates that:

*“proposals for the generation of energy from renewable resources will be permitted provided that:*

- i) Any detrimental effect on features and interests of acknowledged importance, including local character and amenity, is outweighed by environmental benefits; and*
- ii) Proposals include details of associated developments including access roads and other ancillary buildings and their likely impact upon the environment.”*

- 3.2.15 In addition, the reasoned justification to Policy DS21 indicates that renewable energy generation developments will be supported in principle and biomass from agricultural products is a suitable renewable energy generation method.

## **3.3 Conclusions on Need**

- 3.3.1 Whilst national policy is unequivocal that it is not necessary to demonstrate need as part of this planning application, the applicant has elected to identify

the need for the Brigg REP in order to highlight a material planning consideration to which considerable weight should be attached.

3.3.2 The need for the Brigg REP development has been considered in the context of a number of strategic policy documents. The assessment has established that there is a demonstrable need for the development as:

- the Energy White Paper includes targets which aim to see renewables grow as a proportion of electricity supply to 10% in 2010, rising to 20% in 2020. The provision of electricity supply by renewables in 2006 was 4%. Consequently, a significant number of new facilities will need to come forward if the targets are to be achieved;
- the UK Biomass Strategy promotes the use of biomass as an energy source and notes that biomass will have a central role to play in meeting the Government's aspiration of 20% renewable energy by 2020. It also acknowledges the importance of energy generated from biomass in tackling climate change;
- the UK Renewable Energy Strategy Consultation Document promotes investment in renewable energy technology, in order to meet the EU set target that renewables will constitute 15% of the UK energy mix by 2020;
- from a national, regional and local perspective, all extant and emerging policy and strategy documentation support renewable energy developments;
- there is a significant renewable energy capacity shortfall on a regional basis. The RSS states that in 2007 installed renewable energy capacity totalled approximately 168MW. Therefore, there is a substantial requirement for new renewable energy capacity in order for the region to meet its targets of 708MW by 2010 and 1,862 by 2021. Consequently, there is a need for a range of new renewable energy facilities such as the Brigg REP;
- the 2020 target for renewable energy generated in North Lincolnshire is 112MW. The Brigg REP would produce 40MW at maximum capacity and as such, would be capable of providing over a third of the 2021 target for renewable energy in North Lincolnshire.