

BroadwayMalyan^{BM}

**S.36 Application Portbury Dock
Renewable Energy Plant
Planning Statement**

Prepared by Broadway Malyan on
behalf of E.ON Climate & Renewables
UK Developments Limited August 2009



E.ON Climate & Renewables UK Developments
Limited

Proposed Portbury Dock Renewable Energy Plant

S.36 Application

Planning Statement

August 2009

Contents

	Page
1. Introduction	1
2. Site and Surroundings	2
3. The Proposed Development	3
4. Planning Policy	6
5. Planning Issues	26
6. Summary and Conclusions	30

Location Plan

Portbury Renewable Energy Plant – Illustrative Plan

1.0 Introduction

1.1. This planning statement has been prepared by Broadway Malyan on behalf of E.ON Climate & Renewables Developments Ltd (EC&R) to accompany an application under s.36 of the Electricity Act 1989 to the Department for Energy and Climate Change. This statement forms part of the application. The statement draws on and should be read in conjunction with other material submitted as part of the s.36 application, namely:-

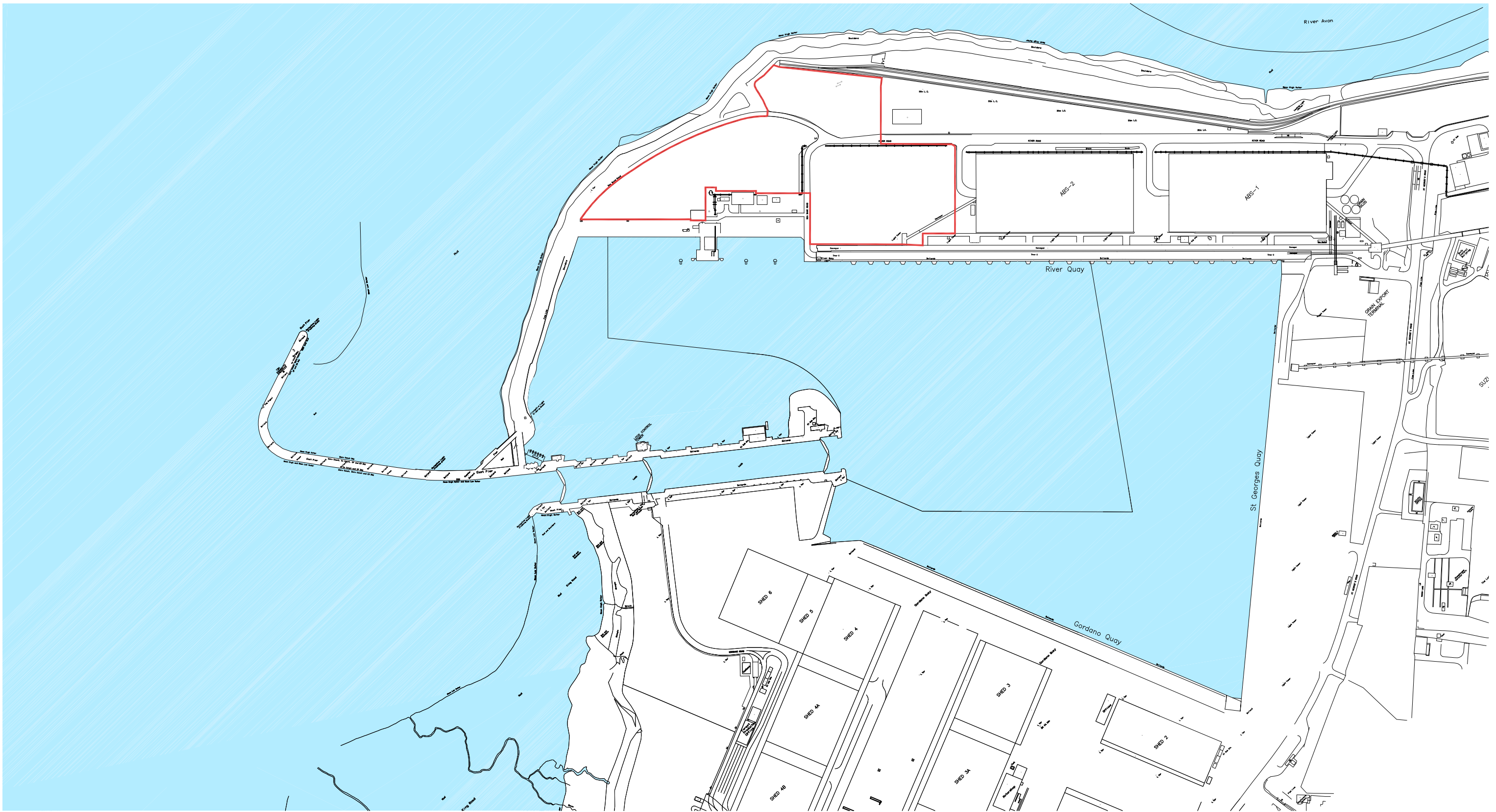
- The Environmental Statement and Non-Technical Summary
- The Design and Access Statement
- The Statement of Community Involvement
- The Sustainability Statement.
- The Carbon Dioxide Emissions Study

1.2. A location plan is included in this section (Figure 1). This statement also reflects an illustrative site layout (Figure 2) for the site which is included in section 3 of this statement.

1.3. The purpose of the statement is to outline the proposals and the planning context in which they are to be considered and in so doing confirm the benefits that will be delivered by a Renewable Energy Plant at Royal Portbury Dock North Somerset.

1.4. This proposal is an important component of E.ON's growing portfolio of renewable energy generating projects project which have or are being developed in response to the pressing issue of climate change and the Government's objectives, at national and regional levels, to develop renewable energy sources.

1.5. The Portbury Dock Renewable Energy Plant will provide a clean, 'renewable' electrical generating capacity of approximately 150MW, sufficient to provide for the needs of approximately 200,000 homes and is expected to result in savings of at least 400,000 tonnes of carbon dioxide annually. The plant will utilise renewable biomass fuel.

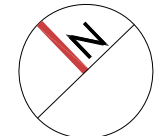


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e-on | Engineering

BroadwayMalyan^{BM}

T: +44 (0)161 819 2277 F: +44 (0)161 819 2332 E: Man@BroadwayMalyan.com
 Merchants Warehouse, Castle Street, Castlefield, Manchester M3 4LZ



Client
E-ON

Project
Portbury Dock Renewable Energy Plant

Description
Location Plan

Status

Scale 5000 @A3	Drawn ir	Date Aug 09
Job number 26289	Drawing number Figure 1	Revision

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2.0 The Site and Surroundings

Introduction

- 2.1 The proposed site for the Portbury Dock Renewable Energy Plant is located within Bristol Port at Royal Portbury Dock. The total area of the Bristol Docks (Avonmouth and Royal Portbury Docks) is approximately 1025 hectares (2600 acres). Approximately 5 hectares (12 acres) will be utilised for development of the Renewable Energy Plant at Royal Portbury Dock. The application site is largely flat. The area currently consists of hardstanding on reclaimed land and is currently used for car storage.

Location

- 2.2 The site lies in the district of North Somerset in the South West of England at the border of the district boundary with Bristol City Council. The site is approximately 12 km to the south-west of Bristol City Centre, and approximately 2km north-west of the M5 motorway between junctions 18 and 19. The site is adjacent to the Severn Estuary and is bounded on its north-eastern side by the River Avon.
- 2.3 The site lies at the northern, seaward edge of the Royal Portbury Dock operational area. Existing storage buildings and associated infrastructure lie immediately to the south-east of the application site with the Dock itself located to the west. The mouth of the River Avon is located to the north-east.
- 2.4 The Royal Portbury Dock Estate contains a number of large buildings and structures including grab unloader cranes and the ABS sheds (animal feed stores). The wider Port area contains a number of tall buildings and structures including the ADM Milling building, Avon Mill, No. 5 Granary and three wind turbines.
- 2.5 The majority of the Port is covered with built structures, access roads and hard standings used for storage and car parking. The area is generally industrial in character.

Access to the Site

- 2.6 The site is accessed from Junction 19 of the M5 and the A369 via Royal Portbury Dock Road. This is a two way single carriageway which is largely a private road in the ownership of The Bristol Port Company and only becomes a public highway as it approaches the M5/J19 junction. Within the Dock the site is readily accessible from the existing Dock estate road network.

3.0 The Proposed Development

Introduction

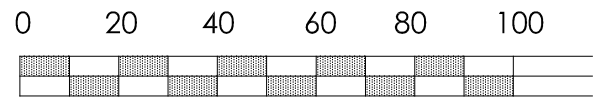
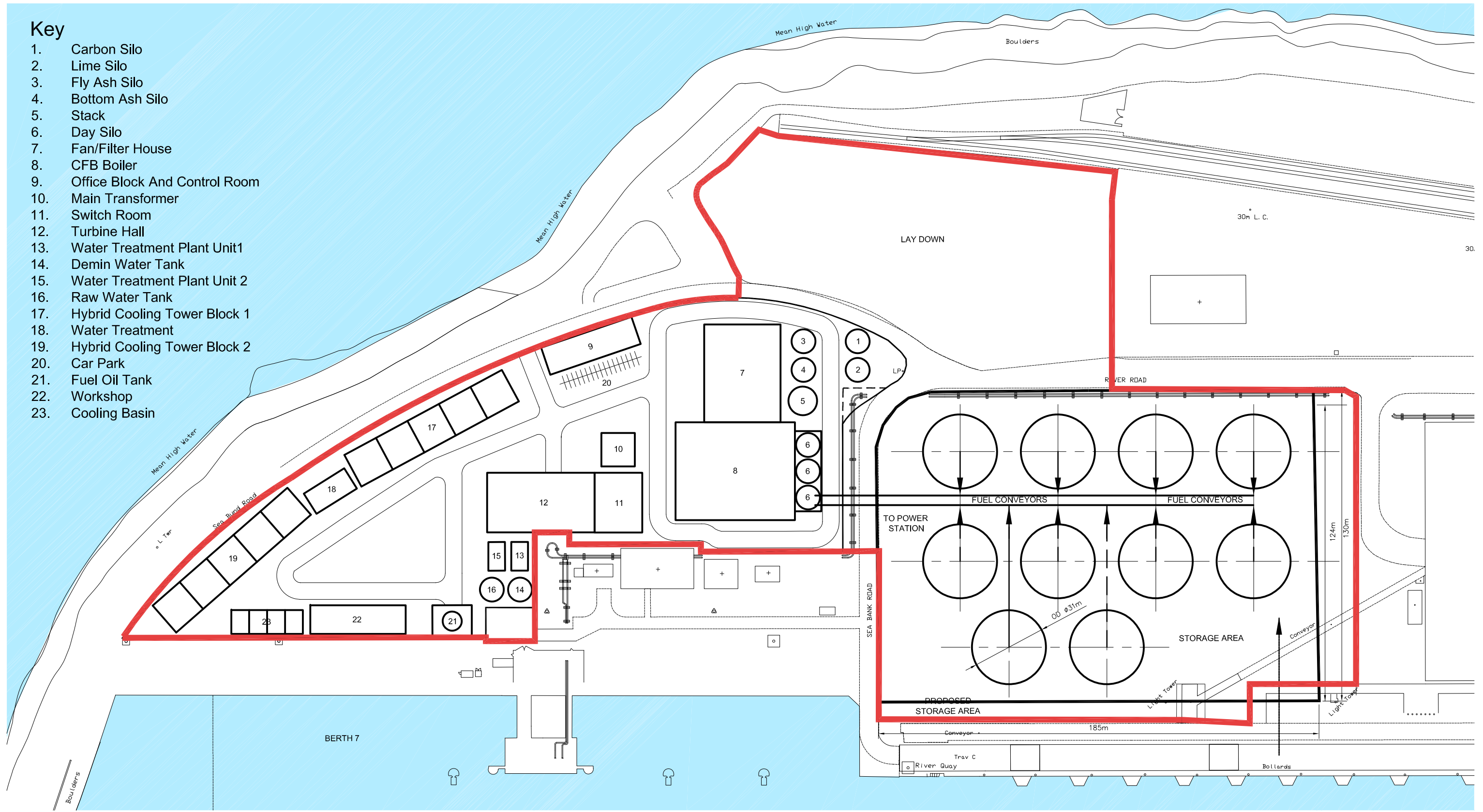
- 3.1 This Planning Statement supports a consent application under Section 36 of the Electricity Act 1989 for the construction and operation of the proposed Portbury Dock Renewable Energy Plant.
- 3.2 The detailed design of the Renewable Energy Plant will be carried out on behalf of EC&R by the contractors chosen for the design, construction and commissioning of the Plant. Notwithstanding that the application is based upon the known and definitive parameters of the proposed development that are to be established through this application. These parameters, as set out in the Environmental Statement, are based on the particular circumstances of the site and the experience of other similar developments, notably similar plants owned and operated by E.ON in Germany and a plant recently developed in the UK at Steven's Croft, Lockerbie in Scotland.
- 3.3 The proposed plant will be licensed for operation by the Environment Agency under the Environmental Permitting (England and Wales) Regulations 2007 and suitable plant and systems will be incorporated in the design to minimise emissions in line with Best Available Techniques. This section of the Planning Statement provides a summary description of the proposed Plant. A fuller description is included in the Environmental Statement which accompanies this application.

Plant Components and Operation

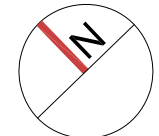
- 3.4 The proposed plant will comprise the following key elements:
- 3.5 Fuel Store – the processed fuel store will consist of a series of up to ten circular section silos. The fuel will be reclaimed by automatic conveyors. The capacity of the store will be equivalent to at least fourteen days operation at full output such that the plant can continue to operate between ship deliveries and over weekends and bank holidays when no new local deliveries to the plant are made. From this store the fuel will be conveyed to small buffer silos in the boiler house. The buffer silos will have a limited capacity of around one hour and will be used to meter the flow of fuel to the boiler.
- 3.6 Boiler House – the fuel store will feed fuel into the combustor, housed in the boiler house. The fuel will be burnt in the combustor to generate steam through heating of water. Steam will be fed into the turbine housed in the turbine hall. The Boiler House will have a footprint of approximately 50 metres by 100 metres and a height of approximately 64 metres.
- 3.7 Turbine Hall – This building will house the Steam Turbine and generator which will generate electricity. This building will have a footprint of approximately 45 metres by 25 metres and a height of approximately 30 metres.
- 3.8 Flue Gas Treatment and Stack. Flue gas resulting from the combination process will be cleaned and filtered prior to emission to air in line with current legislation. A stack of 120 metres will be used to emit the treated flue emission to air. This height of stack will enable the required dispersal to be achieved to realise emissions and air quality standards.

Key

- 1. Carbon Silo
- 2. Lime Silo
- 3. Fly Ash Silo
- 4. Bottom Ash Silo
- 5. Stack
- 6. Day Silo
- 7. Fan/Filter House
- 8. CFB Boiler
- 9. Office Block And Control Room
- 10. Main Transformer
- 11. Switch Room
- 12. Turbine Hall
- 13. Water Treatment Plant Unit1
- 14. Demin Water Tank
- 15. Water Treatment Plant Unit 2
- 16. Raw Water Tank
- 17. Hybrid Cooling Tower Block 1
- 18. Water Treatment
- 19. Hybrid Cooling Tower Block 2
- 20. Car Park
- 21. Fuel Oil Tank
- 22. Workshop
- 23. Cooling Basin



BroadwayMalyan^{BM}
 T: +44 (0)161 819 2277 F: +44 (0)161 819 2332 E: Man@BroadwayMalyan.com
 Merchants Warehouse, Castle Street, Castlefield, Manchester M3 4LZ



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Figure 2
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- 3.9 Hybrid Cooling Tower System– A recirculating cooling water (CW) system will be used to condense the steam turbine exhaust using hybrid cooling towers. A hybrid cooling tower system uses a low level mechanical draught tower incorporating both “wet” and “dry” sections to minimise plume visibility. The heated cooling water from the steam turbine condenser initially passes through tubes in the dry section where part of the heat is removed by the air current induced by the fans. The water is then cooled further by an evaporative process in the wet section of the tower. The heated air from the dry section is then mixed in the upper part of the tower with the vapour from the wet section. This lowers the relative humidity before the air current leaves the cooling tower, which significantly reduces plume formation above the tower.
- 3.10 Administration Building – the plant will also accommodate an administrative and technical building.
- 3.11 The detailed design of the plant will in large part need to respond to the type of boiler, turbine and other equipment utilised. The efficiency, robustness and suitability of plant technology will be a key factor the choice of primary contractors.
- 3.12 The providers of the boiler, turbine and related equipment will be engaged following competitive bidding in due course. Therefore the exact configuration of the plant infrastructure and thereby the location and massing of buildings can only be determined once the primary contractors have been appointed.
- 3.13 The principal biomass fuel to be burnt by the plant will be imported forestry product, and locally recycled waste wood. It is expected that approximately at least 70% of the biomass fuel will be imported with the remainder being sourced in the region. The design generating capacity of the proposed plant has not yet been determined precisely as it will depend on the completion of a fuel supply study and discussions with key stakeholders. However, the plant is likely to have a net electrical output of about 150MW which would require a fuel supply of about 1,200,000 tonnes per year. For the purposes of the Environmental Impact Assessment a conservative approach has been used by assuming an output 10% higher at 165MW.

Use of Heat

- 3.14 The proposed plant will be technically capable of supplying renewable heat to neighbouring industrial establishments or residential areas. The amount of heat distributed will be determined by potential customers’ requirement and commercial terms. The individual elements of the plant are described below.
- 3.15 The proposed renewable energy plant will be capable of providing the following services to potential nearby consumers should this be feasible:
- Electricity
 - Steam
 - Hot Water
- 3.16 E.ON Engineering completed a study to identify potential consumers of heat and power in the local vicinity of the proposed development. It identified a number of potential industrial

consumers within the Royal Portbury Dock and the possibility of supplying heat to two potential urban expansions in the wider North Somerset Region.

- 3.17 Heat and/or power supply from the proposed dock development is technically feasible. However until the specific requirements from the potential consumers are known it is not possible to finalise the design of the plant.

Electricity Distribution

- 3.18 The plant will be electrically connected into an existing substation which is sited at Portishead, adjacent to the Royal Portbury Dock. It will be by way of a buried cable. The cable will be owned and maintained by Western Power Distribution and installed under their permitted development rights.

Construction

- 3.19 The plant construction programme will be up to 40 months from placing of contracts to full commercial operation. The traffic generation at the peak of construction will be about 325 vehicles per day including heavy goods vehicles (HGV). Larger items and abnormal loads will be delivered direct to the Royal Portbury Dock by sea.

Employment

- 3.20 The proposed Renewable Energy Plant is expected to employ around 35 full time personnel with a further 20 full time equivalent contract personnel undertaking routine and annual maintenance. Additional staff may be appointed to supervise fuel deliveries and to undertake routine checks and housekeeping duties local to the plant. Additional personnel will be employed indirectly to support the fuel supply infrastructure.

4.0 Planning Context

Introduction

4.1 This section of the Planning Statement confirms the national, regional and local planning context relevant to the proposed Renewable Energy Plant. For the sake of completeness this assessment also considers waste policy at national, regional and local level. Before considering planning policy, UK Energy Policy as it relates to Renewable Energy is addressed.

UK Renewable Energy Policy

4.2 The UK Government is developing a legislative framework to support its commitment to the development of Renewable Energy sources. In 2007 the Government published the White Paper 'Meeting the Energy Challenge'. The legislative elements of this have been implemented in the Energy Act 2008, the Climate Change Act 2008 and the Planning Act 2008. The UK Government's commitment to increasing renewable energy generation is encapsulated on the UK Renewable Energy Strategy published in 2009.

Meeting the Energy Challenge

4.3 The 2007 Energy White Paper established four key themes of UK energy policy:

- To promote (in UK and internationally) open, competitive energy markets which provide fair access to energy supplies and foster investment and deliver secure supplies at competitive prices;
- To take action to put a value on carbon emissions to ensure that investment decisions fully reflect the costs of climate change;
- To drive investment to accelerate the deployment of low carbon technologies; and
- To promote policies to improve energy efficiency, to cut emissions and reduce our dependence on fossil fuels, consistent with economic growth.

4.4 The White Paper confirms that renewable energy is an integral part of the Government Strategy for reducing carbon emissions.

4.5 The White Paper confirms the intentions to introduce a series of measures to strengthen delivery of renewable energy generation. These include:

- Strengthening and modifying the Renewables Obligation to provide additional support to the renewable energy generation market
- Improving the planning consenting process for on and offshore renewables by publishing a statement of need for renewables This is to emphasises the importance of renewables in helping us to meet the UK's climate change and energy policy goals, and will be material consideration in all planning applications and inquiries;
- building on this statement of need, and the existing Planning Policy Statement (PPS22) on renewables, by putting renewables generation at the centre of the proposed Planning Policy Statement (PPS) on Climate Change.

The Energy Act 2008

- 4.6 Amongst other things and in line with the Energy White Paper, the Energy Act provides for the strengthening of the Renewables Obligation to provide for the diversification of UK electricity generation.

The Climate Change Act 2008

- 4.7 The Climate Change Act creates a new approach to managing and responding to climate change in the UK, by setting ambitious, legally binding targets, taking powers to help meet those targets, strengthening the institutional framework, enhancing the UK's ability to adapt to the impact of climate change, and establishing clear and regular accountability to the UK Parliament and to the devolved legislatures.
- 4.8 The Act therefore introduces a legally binding target of at least an 80% cut in greenhouse gas emissions by 2050, to be achieved through action in the UK and abroad. Also a reduction in emissions of at least 34% by 2020. Both these targets are against a 1990 baseline.
- 4.9 A carbon budgeting system which caps emissions over five-year periods, with three budgets set at a time, to set out our trajectory to 2050. The first three carbon budgets will run from 2008-12, 2013-17 and 2018-22.

The Planning Act 2008

- 4.10 The 2008 Planning Act, amongst other things, reinforces the Government's commitment to placing greater emphasis on delivering additional renewable energy capacity. The Act provides for the establishment of an Infrastructure Planning Commission (IPC) which alongside national policy statements (NPSs) is to provide greater certainty to developers and other stakeholders in the planning of major energy and other infrastructure projects. The Act also places a duty on local authorities to take action on climate change in their development plans.

The UK Renewable Energy Strategy

- 4.11 The Government's approach to supporting the development of the Renewable Energy is brought together in the UK Renewable Energy Strategy, published in 2009.
- 4.12 The strategy confirms that *'the UK needs to radically increase its use of renewable energy.'* The strategy aims to facilitate the delivery of at least 15% of the UK's energy consumption (electricity, heat and transport) from renewable sources by 2020. This is based upon an estimated 30% of electricity being generated by renewable sources.
- 4.13 The strategy commits to speeding up the planning process in relation to Renewable Energy. In particular the strategy proposes a strategic approach to planning, ensuring that all the English regions have robust evidence-based strategies for delivering their renewable potential in line with the 2020 target.

Planning Review

4.14 The national policy documents considered are:

- PPS1 Delivering Sustainable Development (and supplement)
- PPS10 Planning for Sustainable Waste Management
- PPS22 Renewable Energy (including the companion guide)
- PPS23 Planning and Pollution Control
- PPS25 Development and Flood Risk
- PPG13 Transport

4.15 A consultation paper on Planning Policy Statement 4 – ‘Planning for Prosperous Economies’ was published (May 2009) and is in early stages of development. Under its definition of what is meant by economic development, it includes *‘development that achieves the objective of producing or generating an economic output or product.’* A Renewable Energy Plant can be considered to fall within this definition. The draft PPS4 is therefore also considered in this section. Development Plan documents considered are:

- Regional Spatial Strategy (RPG10)
- Avon Structure Plan
- North Somerset Replacement Local Plan
- North Somerset Waste Local Plan

4.16 A revision of Regional Spatial Strategy is well advanced. North Somerset Council is at the early stages of developing the North Somerset Development Framework. A draft West of England Joint Waste Core Strategy has also been prepared. These emerging documents will therefore also be considered as part of the development plan context.

National Planning Policy

PPS1: Delivering Sustainable Development (2005)

4.17 This Planning Policy Statement (PPS) provides the overarching framework for national planning policy and places sustainable development at the heart of the planning process.

4.18 In establishing the key principles of national planning policy the PPS confirms that, amongst other things, Regional and local planning authorities should ensure that development plans *‘contribute to global sustainability by addressing the causes and potential impacts of climate change’*. This is to be achieved by policy through inter alia promoting *‘the development of renewable energy resources’* (para B (ii)).

- 4.19 In considering the prudent use of natural resources the PPS confirms that planning authorities *'should promote and encourage, rather than restrict, the use of renewable resources (for example, by the development of renewable energy).'*
- 4.20 The supplement to PPS1, Planning and Climate Change (December 2007) provides further guidance on approaches to renewable energy generation. At para. 19 the supplement confirms that in developing core strategies and supporting local development documents, planning authorities should provide a framework that promotes and encourages renewable and low carbon energy generation. Policies should be designed to promote and not restrict renewable and low-carbon energy and supporting infrastructure.
- 4.21 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;
 - ensure any local approach to protecting landscape and townscape is consistent with PPS22 and does not preclude the supply of any type of renewable energy other than in the most exceptional circumstances;
 - alongside any criteria-based policy developed in line with PPS22, consider identifying suitable areas for renewable and low-carbon energy sources, and supporting infrastructure, where this would help secure the development of such sources, but in doing so take care to avoid stifling innovation including by rejecting proposals solely because they are outside areas identified for energy generation; and expect a proportion of the energy supply of new development to be secured from decentralised and renewable or low-carbon energy sources.

PPS10: Planning for Sustainable Waste Management

- 4.22 This PPS establishes a number of key objectives for waste management. Regional planning bodies and all planning authorities should, amongst other things:
- "Help deliver sustainable development through driving waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option...."*
- 4.23 Annex C to the PPS confirms the waste hierarchy, which in order of preference is:
- Reduction
 - Re-use
 - Recycling and Composting
 - Energy Recovery
 - Disposal

PPS22: Renewable Energy (2004)

- 4.24 This PPS establishes the approach to facilitating the development of renewable energy sources. The key principles for national planning policies on renewable energy confirms that, amongst other things:

Renewable energy developments should be capable of being accommodated throughout England in locations where the technology is viable and environmental, economic and social impacts can be addressed satisfactorily (para 2 (i)).

Regional Spatial Strategies and local development documents should contain policies designed to promote and encourage, rather than restrict, the development of renewable energy sources (para 1(ii)).

Planning authorities should set out the criteria that will be applied in assessing applications for planning permission for renewable projects (para 1(iii)).

The wider environmental and economic benefits of all proposals for renewable energy are material considerations and should be given significant weight in determining applications (para 1 (iv)).

Development proposals should demonstrate any environmental, economic and social benefits as well as how any environmental and social impacts have been minimised through careful consideration of location, scale, design and other measures (para 1 (viii)).

- 4.25 The PPS notes that biomass projects are likely to require the transportation of material leading to increases in traffic (para 24). It is noted that such facilities should be located as close as possible to sources of fuel. However, in determining planning applications, planning authorities should recognise that other considerations, such as connection to the grid and the potential to use heat will influence suitable locations.

Planning for Renewable Energy- A Companion Guide PPS22

- 4.26 This guide provides advice on the planning and consideration of renewable energy schemes as an accompaniment to PPS22. The guide illustrates some of the potential benefits of renewable energy schemes (para 2.7) including:

- Reducing carbon emissions;
- Creating new habitats (such as woodland planting);
- Promoting the management of existing environments;
- Improving air quality (through the reduction in fossil fuel emissions); and

- Landfill reduction.
- 4.27 Economic benefits can include (para 2.8) job creation – direct, indirect and induced and Increased security and reliability of supply.
- 4.28 The guide confirms the positive approach to be taken to applications for renewable energy proposals and the use of criteria based policies (para 2.16). Regional and local authorities are to establish policies that *‘will be supportive of renewable energy proposals in locations where environmental, economic and social impacts can be addressed satisfactorily’* (para 2.18).
- 4.29 The guide at Technical Annex 1 ‘Biomass’ provides guidance on the consideration of biomass-fired renewable energy proposals, which is reflected in the approach taken in the Environmental Statement.

PPS23: Planning and Pollution Control

- 4.30 This PPS confirms that any considerations of the quality of land, air, water and potential impacts arising from development, possibly leading to impacts on health are capable of being material considerations in the determination of planning applications. The importance that Government attaches to controlling and minimising pollution is underlined.
- 4.31 The policy in this PPS has been reflected in the approach to the proposed development and is reflected in the approach to the environmental assessment, documented in the Environmental Statement.

PPS25: Development and Flood Risk

- 4.32 This PPS confirms the key planning objectives on development and flood risk are to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flood and to direct development away from areas at highest risk. Where new development is, exceptionally, necessary in such areas, policy aims to make it safe without increasing flood risk elsewhere and where possible, reducing flood risk overall.
- 4.33 Planning applications in areas at risk of flooding are to be accompanied by a Flood Risk Assessment.
- 4.34 Government policy on managing flood risk has been noted in developing the proposals and in the preparation of this application. This is considered in more detail in the Environmental Statement.

PPG13: Transport

- 4.35 PPG 13 provided guidance on how the need for travel is to be managed through the planning process and the consideration to be given to promoting sustainable forms of transport and freight distribution.
- 4.36 Significant developments are to be accompanied by a Transport Assessment and Travel Plan.
- 4.37 Government guidance on transport has been reflected in the development of the proposals for the Portbury Dock Renewable Energy Plant. Accessibility and traffic movements are considered further in the Transport section of the Environmental Statement.

Draft PPS4: Consultation Paper – Planning for Prosperous Economies

- 4.38 The revised consultation paper on PPS4 sets out the policy framework for planning for sustainable economic growth and covers the Government's objectives for delivering prosperous economies.
- 4.39 In particular, Policy EC2: 'Regional Planning for Prosperous Economies' provides for regional planning bodies to *'where possible, identify and plan for new or emerging sectors likely to locate in the region...This may include businesses taking advantage of low carbon economic opportunities, such as those producing low carbon goods or services'* (para EC2.1, 3)

National Planning Policy – Assessment

- 4.40 National planning policy is strongly supportive of renewable energy development, recognising its contribution towards sustainable development and tackling climate change. Policy requires regional and local authorities to be positive in their approach towards renewable energy generation development proposals. Policy acknowledges the range of location drivers for energy generation including fuel supply, connection to the National Grid and the potential to use heat generated by the process.
- 4.41 Waste policy also requires consideration to be given to driving waste management up the waste hierarchy. This proposal will make use of, in energy recovery, some material that would otherwise be disposed of to landfill.
- 4.42 Within that context, policy notes that environmental, economic and social factors also need to be assessed and considered in determining development proposals. Notwithstanding that, the wider environmental and economic benefits of all proposals for renewable energy are material considerations and should be given significant weight in determining applications.
- 4.43 In the light of this assessment and the findings of the Environmental Statement that accompanies this application it is considered that this proposal is consistent with National Planning Policy and the UK Renewable Energy Strategy.

Development Plan Context

4.44 As noted previously the adopted Development Plan for the application site comprises:

- Regional Planning Guidance for the South West (RPG 10) (2001)
- The Joint Replacement Structure Plan (2002)
- The North Somerset Replacement Local Plan (2007)
- The North Somerset Waste Local Plan (2002)

4.45 The preparation of the revised Regional Spatial Strategy (RSS) is at an advanced stage and therefore the Draft Regional Spatial Strategy for the South West Incorporating the Secretary of State's Proposed Changes (July 2008) will also be considered.

4.46 The local authority is at an early stage in the preparation of the Local Development Framework which will, in due course, replace the Local Plan. A draft West of England Joint Waste Core Strategy has also been produced. Both these documents will also be considered.

Regional Planning Guidance for the South West (RPG10) (2001)

4.47 RPG10 was published in 2001. Whilst it remains the RSS until such time as the draft RSS is published in 2009 it is somewhat outdated. RPG10 was intended to cover the period to 2011. Relevant policies from RPG10 are considered below.

4.48 Policy VIS1: Expressing the Vision - The vision of the RPG is to, amongst other things, *'promote a sustainable development pattern and set out a sequential approach to the location of development...'*

4.49 Policy EN 1: Landscape and Biodiversity - Local authorities and other agencies in their plans, policies and proposals, should amongst other things:

'provide for the strong protection and enhancement of the region's internationally and nationally important landscape areas and nature conservation sites...'

4.50 Policy EN2: Air Quality - Local authorities should:

'include in their development plans and proposals policies on the location of potentially polluting developments and of sensitive developments in the vicinity of existing polluting developments, in line with guidance in PPG23 (as and when it is updated) and in Air Quality and land use planning LAQM.G3 (00);

designate air quality management areas where required as part of the local air quality management process;

ensure that air quality considerations are properly considered along with other material considerations in the planning process, particularly where any air quality management areas have been designated.'

- 4.51 Policy TRAN 8: Ports and Inland Waterways - Local authorities, ports and transport operators and other agencies should work together to encourage the development of waterborne services and facilities. In particular they should, amongst other things:

'support the development of each port in its individual role by safeguarding land for economically beneficial port use that can occur without significant environmental damage;

support the improvement of land based links to the region's ports, subject to the outcome of multi-modal studies, with the emphasis on the most sustainable means of transport;

- 4.52 Policy RE2 Flood Risk - Local Authorities, the Environment Agency, other agencies and developers are to seek to:

'protect land liable to river and coastal flooding from new development, by directing development away from river and coastal floodplains;

promote, recognise and adopt the use of sustainable drainage systems for surface water drainage;

adopt a sequential approach to the allocation and development of sites, having regard to their flood risk potential in accordance with advice in PPG25 (Development and Flood Risk).'

Policy RE5: Management and Transportation of Waste

- 4.53 Policy RE5: Management and Transportation Waste - In order to achieve sustainable waste management (the Best Practicable Environmental Options) on the region, waste planning, disposal and collection authorities, the Environment Agency and waste management and water companies should co-operate to:

'Establish a mix of waste recovery methods, e.g. recycling, composting, energy recovery, etc, regionally and sub-regionally, that will reduce reliance on landfill and will avoid creating over-reliance on any one method or facility.

Pursue the following regional targets:

- Recycle or compost at least 30% of household waste by 2010; and 33% by 2015*
- Recover value from 45% of municipal waste by 2010; and 67% by 2015*
- Reduce land filling of biodegradable municipal waste to 85% of the 1998 level by 2005.*

Give priority to the provision of waste management facilities that will recover value from waste at or near the Principal Urban Areas (PUAs). Those facilities should take account of waste management requirements in the PUA(s) concerned and its neighbouring county areas and

should be planned to contribute to the achievement of the regional targets above, in respect of the urban area(s) and its hinterland.

Ensure that sub regional requirements are taken into account in structure and waste local plans and in waste planning decisions. Structure or (where appropriate) waste local plans should propose targets for the provision of value recovery capacity among participating waste planning authorities. Provision at PUAs and at other urban areas should take the waste management requirements of their neighbouring county areas into account.

- 4.54 Policy RE6: Energy Generation and Use - Local authorities, energy suppliers and other agencies should:

'support and encourage the region to meet the national targets for:

12.5% reduction in greenhouse gas emissions below 1990 levels by 2008-2012 and a 20% reduction (from 1990 levels) in carbon emissions by 2010;

minimum of 11-15% of electricity production to be from renewable energy sources by 2010.

encourage and promote the greater use of renewable energy sources, including community based projects, such as Combined Heat and Power and Community Heating and their integration into more energy efficient new build or redevelopment proposals;

have full regard to the recommendations and detailed background information contained in the report "Renewable energy assessments and targets for the South West" (GOSW APRIL 2001).'

- 4.55 Development plans should:

'specify the criteria against which proposals for renewable energy projects will be assessed, balancing the benefits of developing more sustainable forms of energy generation against the environmental impacts, in particular on national and international designated sites;

promote energy conservation measures through policies guiding the design, layout and construction techniques of new development proposals.'

Draft Regional Spatial Strategy for the South West Incorporating the Secretary of State's Proposed Changes (July 2008)

- 4.56 The proposed changes to the draft Regional Spatial Strategy were published in July 2008, following an Examination in Public in 2007. The consultation period on the proposed changes ended in October 2008. Whilst RPG10 will remain part of the Development Plan until such time as the draft RSS is adopted, significant weight can be attached to it.

4.57 In the introduction to the draft RSS at paragraph 1.6.4 it states

'Energy consumption is a significant contributor to the region's eco-footprint. Reducing the level of demand for energy through improving energy efficiency is a major challenge as is the development of more renewable energy sources in the region. Renewable energy is an exciting economic opportunity identified in the RES, and the RSS provides targets and policies to increase its supply. Currently, only about 3% of the region's electricity requirements are generated from renewable sources, compared to a national target of 20% by 2020. The use of energy is a significant contribution to greenhouse gas emissions and to the region's impact in terms of climate change (also see Policy SD2). By producing more of the energy we use within the region, and from renewable sources, the 'carbon footprint' can be reduced as well as providing economic benefits through creating jobs. Producing energy from a range of renewable resources will also contribute to resilience of supply.'

4.58 Policy SD1 deals with the 'Ecological Footprint'. The region's Ecological Footprint will be stabilised and then reduced by, amongst other things;

'Meeting national and regional targets relating to renewable energy, resource consumption/extraction and waste production/recycling.'

4.59 Policy SD2 deals with Climate Change. The region's contribution to climate change will be reduced by:

'Reducing greenhouse gas emissions at least in line with the current national target, of 30% by 2006 (compared to 1990 levels), as part of a longer term reduction of 60% by 2050'

4.60 The region is to adapt to the anticipated changes in climate by:

'Managing the impact of future climate change on the environment, economy and society

Identifying the most vulnerable communities and ecosystems given current understanding of future climate change and provide measures to mitigate against these effects

Avoiding the need for development in flood risk areas and incorporating measures in design and construction to reduce the effects of flooding

Recognising and putting in place policies and measures to develop and exploit those opportunities that climate change will bring

Requiring 'future proofing' of development activity for its susceptibility to climate change

Improving the resilience and reliability of existing infrastructure to cope with changes in climate and in the light of future demand.'

- 4.61 Policy SD3 deals with The Environment and Natural Resources. The region's environment and natural resources are to be protected and enhanced by:

'Ensuring that development respects landscape and ecological thresholds of settlements.

Reducing the environmental impact of the economy, transport and development.

Positively planning to enhance natural environments through development, taking a holistic approach based on landscape or ecosystem scale planning.

Planning and design of development to reduce pollution and contamination and to maintain tranquillity.

Positive planning and design to set development within and to enhance local character (including setting development within the landscape of the historic environment), and bringing historic buildings back into viable use and supporting regeneration.

Contributing to regional biodiversity targets through the restoration, creation, improvement and management of habitats.'

- 4.62 Policy RTS5 deals with the Ports in the region. Relevant plans and strategies should include policies and proposals that maintain and enhance the role each of the key regional ports, including Bristol Port:

'Bristol Port to meet its potential for providing general and deepwater container freight.'

- 4.63 Bristol and other ports are to give priority to the preparation of 'Masterplans' as a means of identifying future landside infrastructure requirements and demonstrating how conflicts between existing and future uses in the port or on adjacent land can be managed.

- 4.64 The draft RSS notes the environmental designations relevant to the Severn Estuary. Policy ENV1 deals with 'Protecting and Enhancing the Region's Natural and Historic Environment'.

'The quality, character, diversity and local distinctiveness of the natural and historic environment in the South West will be protected and enhanced, and developments which support their positive management will be encouraged. Where development and changes in land use are planned which would affect these assets, Local Authorities will first seek to avoid loss or damage to the assets, then mitigate any unavoidable damage, and compensate for loss or damage through offsetting actions. Priority will be given to preserving and enhancing sites of international or national landscape, nature conservation, geological, archaeological or historic importance. Tools such as characterisation and surveys will be used to enhance local sites, features and distinctiveness through development, including the setting of settlements

and buildings within the landscape and contributing to the regeneration and restoration of the area.

Any development that could have any negative effect on the integrity and conservation objectives of a N2K [Natura 2000] site would not be in accordance with the development plan. Further assessment of the implications for N2K sites is required at subsequent levels including LDDs [local development documents], and any development that would be likely to have a significant effect on a N2K site, either alone or in combination, will be subject to assessment at the project application stage. Three locations are considered to be particularly vulnerable and require special protection – Dorset Heath, River Avon (Hampshire) and Severn Estuary. Paragraph 4.1.16 identifies a number of other sites where further protection may be necessary depending on the impacts of new development proposed through LDDs or planning applications.'

- 4.65 The RSS notes the general Avonmouth areas location in the Severn and Avon Vales landscape character area. Policy ENV2 states:

'The distinctive qualities and features of the South West's landscape character areas will be sustained and enhanced by local planning authorities undertaking assessments of landscape character at a strategic level and in partnership with adjoining authorities (where landscape character areas cross administrative boundaries) in order to identify priority areas for the maintenance, enhancement and/or restoration of that character and provide an appropriate policy framework in LDDs (Local Development Plans) for each area.'

- 4.66 Policy F1 deals with Flood Risk. Taking account of climate change and the increasing risk of coastal and river flooding, the priority is to:

'Defend existing properties and, where possible, locate new development in places with little or no risk of flooding

Protect flood plains and land liable to tidal or coastal flooding from development

Follow a sequential approach to development in flood risk areas

Use development to reduce the risk of flooding through location, layout and design

Relocate existing development from areas of the coast at risk, which cannot be realistically defended

Identify areas of opportunity for managed realignment to reduce the risk of flooding and create new wildlife areas.'

- 4.67 In preparing their LDDs local authorities should have regard to the Regional Flood Risk Assessment.

- 4.68 Policy RE1 establishes a series of renewable energy targets. By 2010 a minimum target of 509 to 611 MWe installed electricity capacity, from a range of onshore renewable electricity technologies, is to be achieved across the region. A target of 35-52 MWe installed electricity capacity (MWe) is established for the former Avon area, which includes North Somerset. By 2020 there is to be a total of 850MWe installed onshore capacity in the region.
- 4.69 Policy RE3 deals with Renewable Heat Targets. A target for the region of 100 MWh is established for 2010 and 500 MWh by 2020.
- 4.70 Policy RE4 requires local authorities to take into account the wider environmental, community and economic benefits of proposals for renewable energy facilities, whatever their scale.
- 4.71 Policy ES2 requires local development plans to ensure there is a range of available employment land to meet the needs and support development of emerging business sectors.

Joint Replacement Structure Plan (2002)

- 4.72 The Bath and North East Somerset, North Somerset and South Gloucestershire Joint Structure Plan was adopted in September 2002.
- 4.73 Under the Planning and Compulsory Purchase Act 2004 adopted Structure Plans are to be replaced by Regional Spatial Strategy. However, adopted Structure Plan policies were to be 'saved' until September 2007. Subsequently the Secretary of State has directed that a number of Structure Plans be saved until such time as the RSS is published in 2009. Relevant saved Structure Plan policies are as follows:
- 4.74 Policy 1 states:
- 'Planning and transport policies for the area will be based on the principles of sustainable development, and will seek to reconcile, balance and integrate the protection and enhancement of economic prosperity and meeting the social needs and aspirations of the people of the area through the provision of opportunities for commercial and industrial development, housing and related services and activities.'*
- 4.75 The policy goes on to outline a number of guiding principles.
- 4.76 Policy 2 deals with the locational strategy of the Structure Plan. Development is to be located so as to, amongst other things:
- 'To realise the economic development potential of the key strategic locations at Avonmouth / Severnside, Royal Portbury, and Emersons Green, by means of a comprehensive and integrated approach to development at each location in conjunction with the provision of transport infrastructure, facilities for public transport services and the environmental framework.'*
- 4.77 Policy 15 deals with the Royal Portbury Dock.

'At Royal Portbury Dock, the continued expansion of port operations and associated activities will be supported where there are no unacceptable implications for the environment, traffic congestion, Green Belt objectives and purposes, and meeting other development requirements. This will require provision for:

The effective and efficient use of the land already identified for development, in particular under-used sites;

Linking the port with the rail network, including safeguarding the option of re-opening the Bristol-Portishead railway line for freight and passengers; and

Rail freight facilities and consideration of additional capacity for moving goods between Royal Portbury Dock and Avonmouth.'

- 4.78 Policy 17 provides for Local Plans to place an emphasis on ensuring the continued conservation and enhancement of the character and distinctiveness of the landscape.

North Somerset Replacement Local Plan (2007)

- 4.79 The North Somerset Replacement Local Plan was adopted in March 2007.

- 4.80 The Proposals Map confirms that the proposed development site is partly covered by a wildlife site designation (policy ECH/14) and that the site lies within an identified flood plain (Policy GDP/2) and the Forest of Avon (Policy ECH/9). Policy GDP/1 deals with preferred locations for development. 'Major' development is to be located in Weston-Super-Mare or in particular circumstances Clevedon, Nailsea and Portishead.

- 4.81 Policy GDP/2 deals with Environmental and public protection:

'Development that, on its own or cumulatively, would result in air, water or other environmental pollution or harm to amenity, health or safety will only be permitted if the potential adverse effects could be mitigated to an acceptable level by other control regimes, or by measures included in the proposals, by the imposition of planning conditions or through a planning obligation.'

- 4.82 Policy GDP/3 deals with 'Promoting Sustainable Design and Construction'. In determining proposals where appropriate and relevant account will be taken of, amongst other things:

'Whether the proposal safeguards and integrates important features, such as areas of ecological, amenity or heritage value, views of public importance across the site and rights of way;

Whether the siting, levels, density, form, scale, height, massing, detailing, colour and materials respect the characteristics of the site and its surroundings and avoids adverse effects within the site and upon adjoining areas through overlooking or overshadowing or overbearing impact.'

- 4.83 The application site lies within an area defined in Policy ECH/9 as the Forest of Avon. Policy ECH/9 states that:

'Within the defined area of the Forest of Avon, landowners and developers will be encouraged to promote its aims and objectives. Where development is permitted, conditions may be imposed or planning obligations sought requiring the design and materials of any buildings, and any related landscaping and planting, to reflect the developing woodland setting, assist in establishing the Forest or otherwise not conflict with community forest projects.'

- 4.84 Policy ECH/10 deals with Biodiversity. Development that is likely to have a significant impact upon biodiversity will not be permitted unless there is an overriding need for the development in the proposed location or measures can be introduced to mitigate such an impact.

- 4.85 Policy ECH/11 deals with protected species and their habitats. Development which could harm, directly or indirectly, nationally or internationally protected species of flora or fauna or the habitats used by such species will not be permitted unless that particular harm could be avoided or mitigated and the species protected by the use of planning conditions or planning obligations.

- 4.86 The Local Plan notes the confirmation of the Severn Estuary SSSI as a Special Protection Area under EC Birds Directive, with the exception of small areas around Royal Portbury Dock.

- 4.87 Policy ECH/12 deals with Wildlife Sites of International Importance. Development which would be likely to have a direct or indirect adverse effect or which conflicts with the conservation objectives of a potential candidate or designated Special Protection Area, Special Area of Conservation or Ramsar site will not be permitted.

- 4.88 Policy ECH/13 considers Sites of Special Scientific Interest and National Nature Reserves.

'Development within or near a Site of Special Scientific Interest (SSSI) or National Nature Reserve that is likely to have a direct or indirect adverse effect on its biodiversity or geological interest will not be permitted unless other material considerations outweigh the loss of biodiversity or geological value of the site concerned and any broader impact upon the national network of SSSIs.'

- 4.89 Part of the application site is identified as a Wildlife Site provided in Policy ECH/14. Policy ECH/14 states that:

'Planning permission will not be granted for development that would have a significant adverse effect on local biodiversity or geological interests, unless the importance of the development outweighs the value of the substantive interest present.'

North Somerset Local Development Framework

4.90 The North Somerset Local Development Framework (LDF) is at the early stages of preparation. As part of the LDF, a pre-production draft of the Core Strategy Development Plan Document was published for consultation in 2007. This identified a number of key challenges as draft guiding principles, including:

'Adjust to the risks and opportunities associated with the consequences of unavoidable climate change.'

4.91 Draft Core Strategy policies and objectives were published for discussion in April 2009. This was an informal round of consultation with key stakeholders in preparation for formal consultation in autumn 2009, following adoption of the RSS.

4.92 Draft Strategic Objective 11 seeks to *'ensure development has a net beneficial effect on the local and global environment by reducing pollution and waste, reducing fossil-fuel based energy consumption and increasing the proportion of energy used that is generated from renewable resources'*.

4.93 Draft Core Strategy policies include the Council's ambitions and objectives covering a range of environmental issues including climate change and renewable energy. In particular, Policy LEL/1 'Climate Change' specifically highlights the Council's commitment to tackling climate change. It identifies a number of principles to support this, including:

'(ix) Proposals for development that contribute to mitigating and adapting to climate change will be encouraged where they are compatible with other national, regional and local policy objectives.'

North Somerset Waste Local Plan

4.94 The North Somerset Waste Local Plan was adopted in January 2002. The Local Plan establishes five objectives for waste management in North Somerset, including:

'.....Objective 1: To ensure that a range of waste management facilities are provided within North Somerset in order that as much waste as possible is dealt with at the top end of the following Waste Hierarchy by the:

minimisation of waste created

re-use of waste materials

recovery of resources from waste either by recycling, composting or by recovery of energy

final disposal of waste to land without energy recovery provided that waste is managed in an economically and environmentally sustainable way

Objective 2: To enable a network of waste management facilities to be established in North Somerset to make an appropriate contribution to managing local, sub-regional and regional waste flows.

Objective 3: To balance the need to make provision for waste management facilities and the protection and enhancement of the environment, using the Best Practicable Environmental Option. All waste management facilities must achieve high standards of environmental performance, and where appropriate a beneficial after-use.

Objective 4: To minimise the impact of transport requirements of waste management and disposal by ensuring that waste is treated and / or disposed of as close as practicable to the point where it is generated having regard to the existing and proposed transport network and transport policies and other transport options;...'

4.95 Policy WLP1 confirms that there will be a presumption in favour of proposals for waste management facilities that facilitate reduction, re-use and recovery of waste.

4.96 Policy WLP2 notes that:

'In order to assist in fulfilling the aim that waste should generally be managed as near as possible to its place of production, the following factors will be taken into account when considering planning applications for waste management development:

the proximity of the potential sources of waste to the proposed facility; and

the location of alternative facilities which could also manage the potential waste; and

the likely duration of the proposed facility.'

4.97 Policy WLP7 deals with Biodiversity. Policy WLP7 states:

'Where an assessment of the effect of proposed waste management development shows that there would be a likelihood of significant harm, directly or indirectly, to the integrity of a site of international importance (i.e. potential and classified SPAs, candidate and designated SACs and Ramsar sites), planning permission will only be granted where there is no alternative solution and there are imperative reasons of overriding public interest that justify the scheme, and any necessary compensatory measures to ensure that the overall coherence of the site is protected, can be secured.

Waste management development which could cause significant harm, directly or indirectly, to a Site of Special Scientific Interest will only be permitted if it can be subject to conditions that would prevent damaging impacts on wildlife habitats or important physical features or if other material factors are sufficient to override nature conservation considerations.

Planning permission will not be granted for waste management development which would significantly harm, directly or indirectly, protected species and local nature conservation interests, including Sites of Nature Conservation Importance, woodland worthy of protection and locally important geological sites, unless the importance of the development would outweigh the value of the substantive interests present, or where it can be demonstrated that appropriate mitigation and / or compensate on measures can be implemented.'

4.98 Policy WLP16 deals with general land use policies in relation to waste management proposals. Policy WLP16, states, amongst other things, that:

'Applications for planning permission for waste management and waste disposal facilities otherwise in accordance with the policies of the Local Plan will be permitted where:

the proposal incorporates measures that ensure that any risk of environmental pollution, including harm to groundwater resources and surface water, is kept to an acceptable level; and

the facility can be satisfactorily accessed from the primary highway network, given the proposed traffic generation, access arrangements existing and proposed, and traffic routing; and

the proposed development would not be sited within a tidal or fluvial flooding area unless it has been demonstrated that there are no reasonable options available in lower risk areas and any harmful effects caused by the behaviour of floodwater and any increase in flood risk on or off site could be satisfactorily mitigated; or the proposed development would be otherwise likely to cause significant harm to flooding or drainage interests; and

statutorily designated sites of historic, architectural, natural and scientific interest will be afforded a high level of protection, in line with government policy. Priority will be given to maintaining the objectives of the designation with particular regard to: the character, architectural and historical importance of listed buildings or conservation areas and their setting; and the archaeological importance of scheduled ancient monuments and their setting.'

West of England Joint Waste Core Strategy Preferred Options Document

- 4.99 The four West of England Unitary Authorities including North Somerset are in the process of preparing a Joint Waste Core Strategy Development Plan Document that sets out the strategic planning strategy for waste. A Preferred Options Consultation Document was published in January 2009, which contains the emerging draft policies for the sub regional area.
- 4.100 The overall vision of the Document includes the commitment to the '3 Rs' – reduce, reuse and recycle in line with national Planning Policy, PPS10. This is reflected in the draft Core Strategy policies 1-3.
- 4.101 A specific strategic aim of the strategy is to *'take account of the development of environmental technologies in the processing of waste'*.
- 4.102 An overarching principle of the Joint Waste Core Strategy Preferred Options relates to climate change. It requires new development to *'address impact on reduction and adaptation to climate change through energy efficiency and energy recovery.'*

Development Plan Assessment

- 4.103 Regional planning policy is supportive of the development of Renewable Energy generating capacity. Opportunities to recover energy from waste are also supported. Development is to be consistent with environmental objectives including the protection of biodiversity, air quality and the landscape.

- 4.104 The continued expansion of port operations and associated activities is supported where amongst other things the development has no unacceptable implications for traffic congestion and the environment.
- 4.105 The Environmental Assessment which accompanies this application confirms that the proposed development is acceptable in environmental and biodiversity terms and that the local highway network can accommodate the estimated levels of traffic to be generated by the plant.
- 4.106 It is therefore considered that this proposal is consistent with relevant development plan policies and will in particular contribute toward regional planning targets for the increase in renewable energy capacity and reduced carbon emission in the South-West as set out in the Regional Spatial Strategy and Draft Regional Spatial Strategy.

5.0 Planning Issues

5.1 In the light of the policy review, this section of the report considers a number of planning matters relevant to the proposed development. The matters considered are therefore:

- Flood Risk
- Site Selection and Relationship to Port Operations
- Biodiversity
- Landscape Impact and Visual Appearance
- Accessibility and Rail Access
- Air Quality and other Environmental Impacts
- Waste Management
- Contribution to renewable generation targets

Flood Risk and Sequential Test

5.2 A flood risk assessment has been submitted as part of the application. Environment Agency flood zone maps for the area suggest that the majority of the proposed development area is located in Flood Zone 2 and therefore at moderate risk of flooding. Topographic data from the site has subsequently demonstrated that the existing ground level at the site is above the peak 1 in 1000 year tidal flood level and therefore the area should be re-designated as Flood Zone 1. Subject to maintenance of site ground levels at existing elevations it is concluded that no additional flood defence measures are necessary. The site is therefore adequately protected from flooding.

5.3 A sequential assessment of alternative sites has demonstrated that there are no other suitable development sites at lower risk of flooding. The site consists of formerly developed land and the proposed development results in a significant sustainability benefits to the local area. As a consequence it is concluded that the Exception Test, as required by PPS25 Development and Flood Risk, is passed.

Site Selection and Relationship to Port Operations

5.4 E.ON is committed to developing a diverse and secure portfolio of sustainable energy sources.

5.5 The source of fuel at The Royal Portbury Dock will only be able to be confirmed once the proposal has the relevant approvals and commitments. This is because E.ON Climate and Renewables UK Developments Limited is only able to commit the necessary long term supply contracts once there is confidence that the necessary consents are in place.

5.6 At The Royal Portbury Dock given the scale of the proposed energy generation, which delivers positive sustainability, efficiency and viability outcomes, it is necessary to provide for the transportation of a substantial amount of fuel to the site from distance.

- 5.7 The biomass production industry is a developing market, and particularly immature in the UK where in addition pressures on land are significant. EC&R therefore envisages that the bulk of material used by the plant will come from overseas. Ship is the most fuel efficient means of importing such material, hence the port-side location.
- 5.8 To maximise the benefits of the port-side location and minimise the level of local delivery traffic, EC&R has estimated that at least 70% of fuel deliveries will come via sea. Therefore EC&R has committed that no more than 30% will be delivered to the site by road or rail. This flexibility is required to maintain security of supply and to make use of potential waste wood and virgin wood sources in the region. Good motorway access is therefore also important. The Port also has rail access which, depending upon the source of fuel and rail line capacity, may provide a further fuel delivery option.
- 5.9 The Royal Portbury Dock is therefore a highly accessible location with a good sea, road and potentially rail access.
- 5.10 The proposed plant will be connected into the National Grid via an existing 132kV substation approximately 2.5 km to the southwest of the proposed development site at Portishead.
- 5.11 The proposed site is considered suitable for biomass renewable energy generation as:
- It is well served by the transport network and can connect to the national grid.
 - The site is brownfield and is in an established dockland and industrial area
 - The site is of sufficient size to accommodate the development
 - The site is in close proximity to potential users of heat, including development areas around Royal Portbury Dock.
- 5.12 The proposals will support the long term viability of the Port through the use of port docking facilities for the supply of fuel over an extended period. The plant will take up only a relatively small part of the Dock area. The proposed location of the plant is not of strategic importance to the operation of the Dock complex.

Landscape Impact and Visual Appearance

- 5.13 As noted in the Environmental Statement the proposed plant will be visible to a greater or lesser degree from various points in the wider area. Many of these views will, however be at some distance and will not be out of keeping with the industrial character of The Port of Bristol. It will therefore not have a significant impact on visual amenity.
- 5.14 The plant will be designed so that it responds to site location and the operational requirements of a renewable energy plant. The approach to design is considered further in a Design and Access statement which accompanies this application.

Biodiversity

- 5.15 The site does not lie within any statutory designated habitat site. However, it does lie immediately adjacent to coastal habitats of the Severn Estuary, which benefits from a range of statutory designations. The proposed development is considered to result in only minor or insignificant impacts on locally, nationally or internationally designated sites.

Accessibility and Use of Rail

- 5.16 A full transport assessment was carried out to assess the transport impact of the proposal to construct and operate the proposed Renewable Energy Plant.
- 5.17 The primary access to the site is via Royal Portbury Dock Road linking to M5 J19. The transport assessment demonstrates that there is no detrimental impact on the local and strategic road network, during both construction and operation.
- 5.18 The use of the rail network appears to be viable from rail network and operational viewpoints but its viability will depend up on a number of factors, including line capacity and the location of supply sources in the UK. The use of rail to supply the site would not impact on the ability to serve the wider port or long held aspiration to introduce passenger services to Portishead.

Air Quality and other Environmental Impacts

- 5.19 The potential environmental impacts such as air, dust, noise, odour, waste and management of waste are all considered in the Environmental Statement which accompanies this application.
- 5.20 The potential environmental effects of the proposed development have been mitigated where possible. The effects that remain are considered to be acceptable in the context of the wider environment and environmental objectives and standards.

Waste Management and Energy Policy

- 5.21 The potential to utilise recycled (waste) wood and divert that material from landfill is consistent with national, regional and local waste management policy.

Energy Policy

- 5.22 The UK Renewable Energy Strategy is strongly supportive of developing additional renewable energy generation capacity and has established the target delivery of at least 15% of the UK's energy consumption (electricity, heat and transport) from renewable sources by 2020.
- 5.23 The Climate Change Act introduces a legally binding target of at least an 80% cut in greenhouse gas emissions by 2050, to be achieved through action in the UK and abroad with a reduction in emissions of at least 34% by 2020.
- 5.24 This proposal will make a significant contribution toward meeting these targets.
- 5.25 Draft RSS also establishes updated regional renewable energy targets. By 2010 a minimum target of 509 to 611 MWe installed electricity capacity, from a range of onshore renewable electricity technologies is to be achieved across the region with 850 by 2020. A target of 35-52 MWe installed electricity capacity (MWe) is established for the former Avon area, which includes North Somerset. This proposal will again contribute significantly toward achieving regional targets and will in itself achieve the target established for the sub-region.

5.26 Policy RE3 deals with Renewable Heat Targets. A target for the region of 100 MWh is established for 2010 and 500 MWh by 2020. This proposal has the potential to make a significant contribution to achieving the regional target.

6.0 Summary and Conclusions

- 6.1 The proposed Portbury Renewable Energy Plant will provide a clean, renewable electrical generating capacity of approximately 150 MW(e). Strong opportunities also exist to make use of heat creating further carbon savings. The plant will utilise renewable biomass fuel.
- 6.2 The Environmental Statement that accompanies this application demonstrates that the environmental impacts of the development are acceptable and where possible those impacts that there are have been mitigated against through appropriate measures. The site is suitable for the proposed use.
- 6.3 National, regional and local planning policy is strongly supportive of the development. The development will assist in addressing the pressing issues of climate change and assist in achieving regional renewable energy generation targets. The proposal also has the potential to divert significant amounts of wood from landfill.
- 6.4 The proposal is in accord with the Development Plan and there are no other material considerations which would prevent an approval.
- 6.5 It is therefore considered that this application can be positively determined by the Secretary of State, with appropriate conditions.