
Energy Statement
for
Sterling Capitol

Capitol Park Extension
Barnsley

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Contents

Executive Summary

- 1.0 Introduction
 - 1.1 General
 - 1.2 Proposed Development
- 2.0 Policy
 - 2.1 National Planning Policy Framework
 - 2.2 Local Planning Policy
- 3.0 Energy Assessment
 - 3.1 Proposed Development
 - 3.2 Decentralised, renewable or low carbon energy sources
 - 3.3 Summary

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Executive Summary

This statement provides an assessment of the energy and sustainability aspects that are relevant to the proposed industrial units, Capitol Park Extension, Barnsley.

The proposed development is for an Extension to the existing Capitol Park comprising Class B2 (Industrial) / Class B8 (Storage & Distribution) uses, and associated landscaping and infrastructure.

The following energy efficiency and demand reduction measures will be considered:

- i) Improve U-values of the external envelope.
- ii) Improve U-value of glazing/maximise solar shading.
- iii) Improve air permeability of building envelope.
- iv) Improve efficiency of the space heating and cooling.
- v) Use of energy efficient lighting.
- vi) Use of intelligent lighting controls.
- vii) Use of variable speed pumps, fans and drives to match supply and demand.

The feasibility of the following potentially appropriate decentralised, renewable or low carbon energy sources will be considered further as the mechanical and electrical services strategy develops:

- i) Air source heat pumps.
- ii) Ground source heat pumps.
- iii) Biomass.
- iv) Photovoltaics.
- v) Solar water heating.
- vi) Wind turbines.
- vii) Combined heat and power.

The proposed units will incorporate design measures and relevant decentralised, renewable or low carbon energy sources as necessary to achieve compliance with Part L of the Building Regulations 2013.

1.0 Introduction

1.1 General

This statement provides an assessment of the energy and sustainability aspects that are relevant to the proposed industrial units, Capitol Park Extension, Barnsley.

The proposed development is for an Extension to the existing Capitol Park comprising Class B2 (Industrial) / Class B8 (Storage & Distribution) uses, and associated landscaping and infrastructure.

The analysis provided identifies the sustainability objectives and indicators that are established within the sustainability policy frameworks and demonstrates how the proposal will deliver these requirements.

The statement recognises the policy imperatives at national and local levels to achieve high standards of sustainability performance, both in terms of the strategic fit of the proposal and the realisation of the development through its design and construction. The approach underlying the design and construction of the development is to recognise the need for future- proofing, enabling high levels of energy performance and minimised resource use.

1.2 Proposed Development

A range of low carbon and renewable energy technologies will be assessed in line with policy CC1 and RE1 of the adopted Barnsley Local Plan (January 2019).

The proposed units will incorporate design measures and relevant decentralised, renewable or low carbon energy sources as necessary to achieve compliance with Part L of the Building Regulations 2013.

2.0 Policy

2.1 National Planning Policy Framework

The National Planning Policy Framework (February 2019) sets out the Government's planning policies for England and how these are expected to be applied. It sets out the Government's requirements for the planning system only to the extent that it is relevant, proportionate and necessary to do so. It provides a framework within which local people and their accountable councils can produce their own local and neighbourhood plans and as a material consideration in the determination of planning applications.

At the heart of the National Planning Policy Framework is a 'presumption in favour of sustainable development'. Within this context National Guidance says that:

- The purpose of the planning system is to contribute towards achieving sustainable development.
- Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):
 - an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
 - a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and
 - an environmental objective – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.
- These objectives are not criteria against which every decision can or should be judged. Plans and decisions must take into account local circumstances to ensure sustainable development is responded to appropriately in different areas.
- At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking. For decision-making this means that:
 - Approving development proposals that accord with the development plan without delay; or

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- Where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:
 - o the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed⁶; or
 - o any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.

Planning policies should follow the presumption in favour of sustainable development approach so development which is sustainable can be approved without delay. All plans should set clear policies that will guide how the presumption should be applied locally.

2.2 Local Planning Policy

The Barnsley Local Plan (adopted January 2019) states the following:

Policy CC1 Climate Change

“We will seek to reduce the causes of and adapt to the future impacts of climate change by:

- *Giving reference to development of previously developed land in sustainable locations;*
- *Promoting the reduction of greenhouse gas emissions through sustainable design and construction techniques;*
- *Locating and designing development to reduce the risk of flooding;*
- *Promoting the use of Sustainable Drainage Systems (SuDS);*
- *Promoting and supporting the delivery of renewable and low carbon energy; and*
- *Promoting investment in Green Infrastructure to promote and encourage biodiversity gain.”*

Policy RE1 Low Carbon and Renewable Energy

“All developments will be expected to seek to incorporate initially appropriate design measures, and thereafter decentralised, renewable or low carbon energy sources in order to reduce carbon dioxide emissions and should at least achieve the appropriate carbon compliance targets as defined in the Building Regulations.

We will allow development that produces renewable energy as long as there is no material harm upon:

- *The character of the landscape and appearance of the area;*
- *Living conditions;*
- *Biodiversity, Geodiversity and water quality;*

- *Heritage assets, their settings and cultural features and areas;*
- *Keys views of, from or to scenic landmarks or landscape features;*
- *Highway safety, or*
- *Infrastructure including radar.*

In assessing effect, we will consider appropriate mitigation which could reduce harm to an acceptable level.

Proposals will be expected to include information regarding their efficiency.

Proposals must be accompanied by information that shows how the local environment will be protected, and that the site will be restored when production ends”

3.0 Energy Assessment

3.1 Proposed Development

The energy strategy will seek to ensure high levels of energy efficiency through a fabric first approach in line with current building regulations. A number of key design principles underlying this approach look to maximise the efficiency of the development. In particular the following energy efficiency and demand reduction measures will be considered:

- viii) Improve U-values of the external envelope.
- ix) Improve U-value of glazing/maximise solar shading.
- x) Improve air permeability of building envelope.
- xi) Improve efficiency of the space heating and cooling.
- xii) Use of energy efficient lighting.
- xiii) Use of intelligent lighting controls.
- xiv) Use of variable speed pumps, fans and drives to match supply and demand.

3.2 Decentralised, renewable or low carbon energy sources

The feasibility of the following potentially appropriate decentralised, renewable or low carbon energy sources will be considered further as the mechanical and electrical services strategy develops to ensure compliance with the carbon emissions targets as defined in the Building Regulations:

- viii) Air source heat pumps.
- ix) Ground source heat pumps.
- x) Biomass.
- xi) Photovoltaics.
- xii) Solar water heating.
- xiii) Wind turbines.
- xiv) Combined heat and power.

3.3 Summary

The proposed units will incorporate design measures and relevant decentralised, renewable or low carbon energy sources as necessary to achieve compliance with Part L of the Building Regulations 2013.