



# RIDGE

**SYMMETRY PARK ARDLEY**  
**SUSTAINABILITY STATEMENT-**  
13/04/22

5017049 – SYMMETRY PARK ARDLEY

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Prepared for

Tritax Symmetry

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## **CONTENTS**

|                                                              |           |
|--------------------------------------------------------------|-----------|
| <b>1. EXECUTIVE SUMMARY</b>                                  | <b>4</b>  |
| <b>2. INTRODUCTION</b>                                       | <b>7</b>  |
| <b>3. CARBON REDUCTION STRATEGY</b>                          | <b>9</b>  |
| 3.1. Introduction                                            | 9         |
| 3.2. Embodied Carbon & Construction Related Carbon Emissions | 10        |
| 3.3. Operational Carbon and Energy                           | 12        |
| <b>4. SUSTAINABILITY STRATEGY</b>                            | <b>15</b> |
| 4.1. Climate Change Resilience                               | 15        |
| 4.2. Transport                                               | 16        |
| 4.3. Ecology                                                 | 16        |
| 4.4. Waste                                                   | 17        |
| 4.5. Water                                                   | 17        |
| 4.6. Materials                                               | 17        |
| 4.7. Pollution                                               | 18        |
| 4.8. BREEAM                                                  | 20        |
| <b>5. CONCLUSION</b>                                         | <b>21</b> |
| <b>APPENDIX A – APPLICABLE SUSTAINABILITY POLICIES</b>       | <b>24</b> |
| A. National Planning Policy Framework                        | 24        |
| B. The Cherwell Local Plan 2011-2031                         | 24        |

## 1.1 EXECUTIVE SUMMARY

At Symmetry Park Ardley the following measures have been incorporated into the design of the development:

- Net Zero Carbon in Construction
- At least 18% available roof coverage PV installation plus infrastructure for 100%
- 25% Electric Vehicle Charging for car parking provided with infrastructure for 100% provision
- 25% improvement on potable water usage.
- Improvements to public transport provision, local cycling and pedestrian network
- Onsite cycle storage facilities
- Minimum BREEAM Very Good certificate
- Biodiversity Net Gain

The development meets the local emerging policies as summarised in the table below:

| Policy Ref                                              | Policy Objective                                                                                                                                                                                                                                                                                         | Development Response                                                                                                                                                                                                                                                                |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ESD 1: Mitigating and adapting to climate change</b> | <ul style="list-style-type: none"><li>• Mitigate the impact of developments within the district on climate change.</li><li>• Design developments to reduce carbon emissions and use resources more efficiently.</li><li>• Promote the use of decentralised and renewable or low carbon energy.</li></ul> | <ul style="list-style-type: none"><li>• Met - BREEAM Wst 05 Climate Change Adaptation credit targeted</li><li>• Met- energy hierarchy used</li><li>• Met – BREEAM Ene04 Low Carbon Design credits targeted</li><li>• At least 18% available roof coverage PV installation</li></ul> |
| <b>ESD 2: Energy hierarchy and allowable solutions</b>  | <ul style="list-style-type: none"><li>• Promote an energy hierarchy.</li><li>• Reduce energy use through sustainable design and construction measures.</li><li>• Efficient and decentralised energy supply.</li><li>• Make use of renewable energy and allowable solutions.</li></ul>                    | <ul style="list-style-type: none"><li>• Met- energy hierarchy used</li><li>• Met – BREEAM Ene04 Low Carbon Design credits targeted</li><li>• At least 18% available roof coverage PV installation</li></ul>                                                                         |

| Policy Ref                                         | Policy Objective                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Development Response                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ESD 3: Sustainable Construction</b>             | <ul style="list-style-type: none"> <li>• Achieve through a combination of fabric energy efficiency, carbon compliance and allowable solutions.</li> <li>• All new non-residential development expected to achieve BREEAM Very Good certification.</li> <li>• The demonstration of the achievement of this standard should be set out in the energy statement.</li> <li>• All development proposals will be encouraged to reflect high quality design and high environmental standards demonstrating sustainable construction.</li> </ul> | <ul style="list-style-type: none"> <li>• Met – BREEAM Ene04 Low Carbon Design credits targeted</li> <li>• Met – overall BREEAM Very Good targeted</li> </ul>                                                                                                                                                  |
| <b>Policy ESD 4 – Decentralised Energy Systems</b> | <ul style="list-style-type: none"> <li>• The use of decentralised energy systems providing heating or heating and power will be encouraged in all new developments.</li> <li>• A feasibility assessment for DH/CHP including consideration of biomass fuelled CHP will be required for all applications for non-domestic developments above 1000m2 floorspace.</li> </ul>                                                                                                                                                                | <ul style="list-style-type: none"> <li>• Met – BREEAM Ene04 Low Carbon Design credits targeted, a Low Zero Carbon Feasibility Study will be produced and this will include assessment of feasibility of decentralised systems</li> </ul>                                                                      |
| <b>ESD 5: Renewable Energy</b>                     | <ul style="list-style-type: none"> <li>• Planning applications involving renewable energy development will be encouraged.</li> <li>• Feasibility assessment for the potential for significant on-site renewable energy provision is required for applications for non-domestic development above 1000m2 floorspace.</li> </ul>                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>• Met – BREEAM Ene04 Low Carbon Design credits targeted, a Low Zero Carbon Feasibility Study will be produced and this will include assessment of feasibility of renewable energy provision</li> <li>• At least 18% available roof coverage PV installation</li> </ul> |

| Policy Ref                                                                            | Policy Objective                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Development Response                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ESD 6: Sustainable Flood Risk Management</b>                                       | <ul style="list-style-type: none"> <li>• Development will only be permitted in areas of flood risk when there are no reasonably available sites in areas of lower flood risk and the benefits of the development outweigh the risk of flooding.</li> <li>• Opportunities sought to restore natural river flows and floodplains.</li> <li>• Buildings over or culverting of watercourses should be avoided and the removal of existing culverts will be encouraged.</li> </ul> | <ul style="list-style-type: none"> <li>• Met – BREEAM credit Pol 03 Flood and Surface Water Management credits targeted.</li> </ul>                                                                    |
| <b>ESD 7: Sustainable Drainage Systems</b>                                            | <ul style="list-style-type: none"> <li>• All developments will be required to use sustainable drainage systems for the management of surface water run-off.</li> </ul>                                                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>• Met – BREEAM credit Pol 03 Flood and Surface Water Management credits targeted.</li> </ul>                                                                    |
| <b>ESD 8: Water Resources</b>                                                         | <ul style="list-style-type: none"> <li>• The Council will seek to maintain water quality and ensure adequate water resources and promote sustainable water use.</li> </ul>                                                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>• Met- the building fit out will include low water using sanitaryware, water meters and water leak detection to minimise water use wherever possible</li> </ul> |
| <b>ESD 10: Protection and enhancement of biodiversity and the natural environment</b> | <ul style="list-style-type: none"> <li>• A net gain in biodiversity will be sought in proposals by protecting, managing, enhancing and extending existing resources and by creating new resources.</li> </ul>                                                                                                                                                                                                                                                                 | <ul style="list-style-type: none"> <li>• Met – biodiversity net gain demonstrated in Appendix 8.2 of the Environmental Statement</li> </ul>                                                            |

## 2.1 introduction

This Sustainability Statement has been prepared by Ridge & Partners LLP on behalf of Tritax Symmetry LLP in support of an outline planning application for the construction of logistics buildings on land known as Symmetry Park Ardley.

An illustrative masterplan has been submitted for information to demonstrate one way in which the proposed parameters could come forward.

The Description of Development is as follows:

*“Application for outline planning permission (all matters reserved except means of access (not internal roads) from B4100) for the erection of buildings comprising logistics (Use Class B8) and ancillary offices (Use Class E(g)(i)) floorspace; Energy Centre, HGV parking, construction of new site access from the B4100; creation of internal roads and access routes; hard and soft landscaping; the construction of parking and servicing areas; substations and other associated infrastructure.”*

This report seeks to demonstrate how the proposals minimise carbon emissions and support other environmental objectives and as a minimum, meets with the relevant development plan policy objectives for new build developments. The report is the culmination of an iterative design process to develop the most sustainable development possible, it has been produced in collaboration with the design team for the project. Ridge and Partners has helped develop the Tritax Symmetry Base Build Specification and Sustainability Policies. The Base Build Specification provides an outline summary of the specification and standards associated with a Tritax Symmetry development and demonstrates the added value, at no extra cost to the end user, which will be provided as standard. The specification also provides details on energy efficiency and carbon reduction targets which are detailed below.

Tritax Symmetry's objective in every sphere of its business is to be at the forefront of best practice and to be ahead of the curve in innovation. In response to enquiries from investors and some forward-thinking occupiers regarding environmental and sustainability policies and their desire to lead Tritax Symmetry continually review current policies relating to BREEAM, EPC ratings, low energy use and carbon reduction in the construction of new logistics buildings.

In April 2019 Tritax Symmetry decided to align with the UK World Green Building Council (UKGBC) definition of 'zero carbon'. Whereas previous policies focused only on operational energy and modelled performance in new buildings, the UKGBC definition expands the scope to in-use performance and to encompass the whole life carbon impacts of both new and, crucially, existing homes and buildings. Tritax Big Box REIT is a Gold Leaf Member of UKGBC recognising its aspiration to sustainability leadership and is now committed to delivering all new developments to meet UKGBC's definition for net zero carbon in construction.



Tritax Symmetry also has a strong aspiration to move towards net zero carbon in operational use – as defined by the UKGBC Framework Definition. To do this they are working with end users to help them understand and drive down their energy demands, and they are providing low carbon energy supply to end users utilising on site renewables, battery storage and low carbon energy suppliers and generation.

Tritax Symmetry recognise the essential role of the built environment in delivering sustainable development, they understand and embrace the need to have a positive impact on the environment. They therefore adopt a holistic approach to creating energy efficient buildings, sensitive to the climate and environment. They believe that the approach to sustainable development must be tailored for every project to meet the needs of the client and the requirements of the project stakeholders.

**BREEAM:** Tritax Symmetry support and use BREEAM as a guideline for sustainable building practices and to embrace local authorities' environmental requirements and objectives. BREEAM is the Building Research Establishment Environmental Assessment Method. It is the most widely used and robust method available for measuring and demonstrating the environmental performance of buildings. As a minimum the scheme will be delivered with a BREEAM Very Good base build certification.

**Energy in buildings:** Tritax Symmetry are committed to delivering energy efficient, low carbon and cost effective buildings, which is assessed through building operation energy usage modelling. This is vital because buildings are responsible for about half of all carbon dioxide emissions in the UK.

**Healthy and productive buildings:** Tritax Symmetry deliver workspaces designed to provide the most comfortable working conditions by optimising daylight, ventilation, heating and cooling systems and provide outdoor recreation and relaxation.

**Renewable energy:** Tritax Symmetry fully investigates the use of integrated renewable energy systems on all projects, in order to minimise the erosion of exhaustible materials e.g. fossil fuels.

**Sustainable design:** Tritax Symmetry consider the following strategies in all new projects:

- Reduce CO<sub>2</sub> emissions and decrease the use of fossil fuels by employing renewable energy sources wherever possible
- Reducing transport during construction by sourcing materials and components locally
- Implementing facilities to minimise car travel for future employers and clients
- Avoiding/minimising mechanical cooling and investing into natural cooling and natural ventilation
- Designing for a maximum use of daylight
- Designing automatic lighting controls and fit low energy and LED lighting throughout the site

- Minimise the use of finite sources and use renewable sustainable elements instead
- Develop a green transport plan in collaboration with local councils
- Reduce water usage by installing water efficient fittings, such as low flow taps, low flow showers, automated controls on urinals and dual flush, low flow WCs
- Fitting water meters and installing water leak detection systems and monitoring water consumption
- Reduce waste by providing recycling facilities during and after construction
- Use recycled components and recycled aggregates wherever possible
- Considering the possibility of creating energy from waste
- Considering off-site manufacture
- Increase biodiversity by investigating the ecological value of the site
- Employing an ecologist to assure maintaining or increasing the ecology on the site
- Employing flood risk minimisation measures
- Reduce pollutants by using non-hazardous healthy building materials with low embodied energy and a good life cycle analysis
- Avoiding toxic materials such as formaldehyde as much as possible
- Installing low NOx heating systems
- Fitting oil interceptors in car parks
- Designing external lighting to minimise light pollution
- Create health and well-being by improving the indoor air quality through ventilation and healthy breathable building materials
- Providing thermal comfort by creating temperature controlled environments
- Providing open spaces and green recreational areas for occupants/users
- Providing views out

### **3.1 Carbon Reduction Strategy**

#### **1.1. Introduction**

Carbon reduction is key to tackling climate change. When discussing carbon in relation to climate change, this is a term used to cover all greenhouse gas emissions and is measured in terms of CO<sub>2</sub> equivalent. The carbon emissions associated with the development include;

- embodied carbon,

- construction related carbon, and
- operational carbon.

### Carbon Reduction Targets are set by;

1. Cherwell District Council declared a Climate Emergency in July 2019, committing it to ensuring its own operations and activities are zero carbon by 2030 and committing to achieving a net zero carbon district by 2030 by leading through example.
2. Local Plan policy **ESD 1 Mitigating and Adapting to Climate Change** sets out how development in the District will be expected to contribute towards tackling climate change. Policy **ESD 2 Energy Hierarchy and Allowable Solutions** requires developments to demonstrate how the 'energy hierarchy' has been applied. Policy **ESD 3 Sustainable Construction**, requires that all new development in Cherwell District meet a minimum of BREEAM 'Very Good' and all development proposals should demonstrate sustainable construction methods.
3. The **UK Climate Change Act** targets a 100% reduction in greenhouse gas emissions by 2050 relative to 1990 levels.
4. **Approved Building Regulations Part L 2013**, requires buildings to exceed appropriate target emission rates for regulated carbon emissions.

### 1.2. Embodied Carbon & Construction Related Carbon Emissions

While operational carbon occurs gradually over the life of a building, embodied carbon emissions occur predominantly in the building materials and their construction, and therefore are emitted immediately. Once the building is constructed, they cannot be reduced further, reduction of embodied carbon emissions therefore plays an essential part in achieving the net zero targets.

Whole life embodied carbon and construction related emissions are generated by equipment used during construction, material extraction, transportation, manufacturing, installation and also dismantling and disposal. This can be modelled using sophisticated software to help identify where the carbon sits to enable options to be implemented to minimise as far as possible the embodied carbon emissions of the development.

At Group level, Tritax Symmetry has in place a commitment that all new commercial buildings delivered by Tritax Symmetry will be Net Zero Carbon in Construction. A feasibility study was

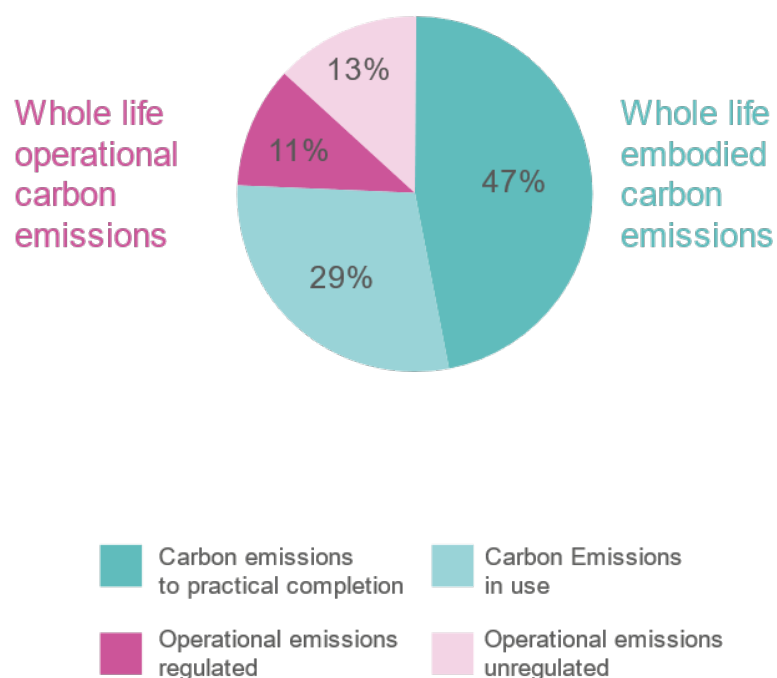
carried out in 2018 to 2019 to quantify the embodied carbon present in a typical logistics warehouse facility based on a Tritax Symmetry unit being constructed in Biggleswade.

All units moving to site nationwide since January 2020 are now being modelled and refined throughout their design and construction phases. The modelling uses a whole life carbon assessment to inform material selection to reduce carbon footprint. Alternative solutions identified as a result of this include:

- introducing cement replacements to foundations, delivery yards and ground floor slab concrete,
- optimising steel frame solutions to minimise required steel, and
- the optimisation of construction equipment use and fuel to reduce emissions.

For every Tritax Symmetry development, a project specific Whole Life Carbon Assessment is undertaken of the final design to calculate the embodied carbon footprint (kgCO<sub>2</sub>eq) of the development.

Below is an example of carbon emissions for a typical warehouse showing how important the embodied carbon emissions are.

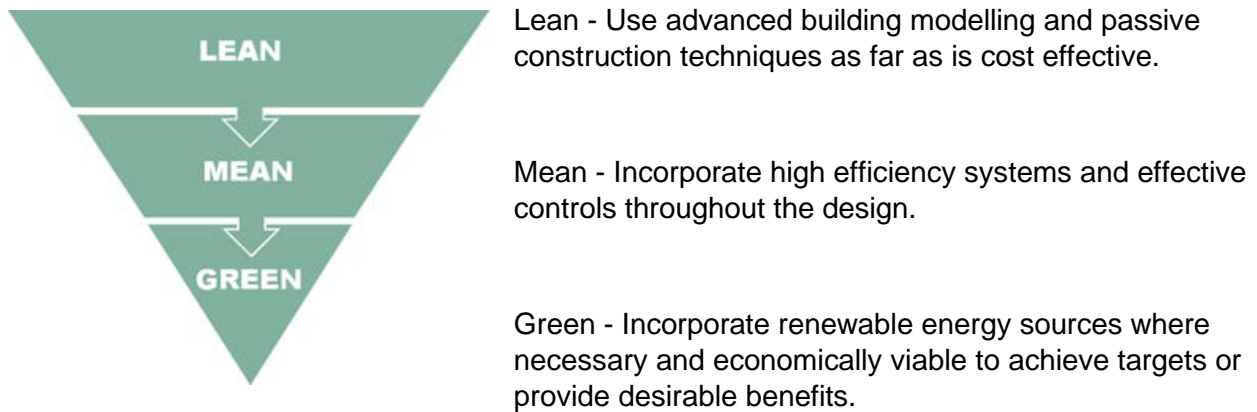


Typical warehouse shed with office space (15% by area); London perimeter, UK

## 1.3. Operational Carbon and Energy

### 1.3.1. Energy Reduction Strategy

The strategy for reducing energy consumption and carbon emissions within the development will follow the energy hierarchy below, which aligns with ESD 2: Energy Hierarchy and Allowable Solution.



### 1.3.2. Passive Design Measures

Passive measures included within the design of the development to reduce energy use and the associated CO<sub>2</sub> emissions include:

- Enhanced insulation to the building envelope which exceeds Building Regulation requirements,
- Engineered facade design, and
- Reduced air permeability standard.

#### 1.3.2.1. Enhanced insulation to the building envelope

Limiting heat losses across the entire building envelope will maximise energy efficiency of the development over its whole life. To achieve this, the fabric thermal U-Value (which is a measure of how thermally efficient the element is) requirements as detailed within Building Regulations will be improved upon.

The targeted values will be confirmed during the detailed design stage of the buildings in conjunction with finalisation of the energy efficiency measures included.

#### 1.3.2.2.Engineered Facade Design

The glazed proportion of the building façades and the location of glazing is designed to maximise the use of natural daylight to offset demand for artificial lighting. At the same time as being designed to maximise passive solar gains, the façade will be designed to minimise thermal losses through the use of high-performance glazing, optimising the glazed to opaque proportion of the façade and enhanced insulation levels above the minimum set down by Building Regulations. This will ensure that there is a balance between providing high levels of daylighting negating the need for artificial lighting, whilst controlling the amount of heat ingress from direct sunshine which would require more cooling. This strategy will minimise the carbon emissions.

#### 1.3.2.3.Reduced Air Permeability

A significant percentage of heat loss from buildings is due to air infiltration associated with poor air tightness. By improving on the air tightness of the building it is possible to reduce infiltrations rates and thus reduce the heat losses, energy use and the associated CO<sub>2</sub> emissions.

The development will be constructed to improved building air tightness criteria significantly beyond the level required to comply with the Building Regulations.

### 1.3.3. High Efficiency Systems, Plant and Controls

High efficiency systems, plant, controls and equipment will be incorporated follows: -

#### 1.3.3.1.Energy efficient LED lighting

Internal lighting within the process and office areas will incorporate energy efficient LED lighting where practicable.

#### 1.3.3.2.Enhanced lighting controls

Automatic presence detection will be included in appropriate areas of the building. This form of control will ensure lights are automatically switched off during periods of non-occupancy. External lighting will be designed to incorporate energy efficient luminaires and an automatic lighting control system utilising daylight sensors and time clock control to ensure energy-efficient operation of the lighting.

#### 1.3.3.3.Optimised plant controls

Control of heating plant will be optimised, and weather compensated to ensure plant operates as close to demand as possible and not a full capacity.

#### 1.3.3.4.Variable speed drives

Variable speed drives will be installed on circulation pumps and ventilation fans to allow the speed of the respective motors to be amended by the automatic controls to suit changing load of the

building. This will ensure energy usage matches demand requirements thus reducing the carbon emissions to a minimum based on end user occupation.

#### 1.3.3.5. Inclusion of heat recovery on ventilation systems

The ventilation systems installed within the development will incorporate heat recovery within the air handling plant to recover heat from the air exhausted to heat the incoming fresh air and therefore reduce energy usage. The air handling plant will have a low specific fan power to minimise the energy used by the fans.

#### 1.3.4. Low Carbon and Renewable Technologies

To complement the energy savings previously detailed and to meet the requirements of Local Plan policies, the following renewable and low carbon technologies have been considered for use within the scheme design:

- Solar Thermal Water Heating
- Biomass
- Photovoltaic Panels
- Ground and Air Source Heat Pumps
- Wind Power
- Combined Heat and Power

##### 1.3.4.1. Feasible Technologies

#### **Photovoltaics (PVs)**

Planning permission is sought for a PV array extending to 100% of the useable roof area (i.e. the omission of space taken by roof lights; man-safe working and the roof signage). The level of PVs installed will be subject to individual occupier requirements. This is to prevent installation and manufacture of unused PV panels and allows the most up to date technology to be fitted when required.

A minimum of 18% of PV array will be installed prior to the use commencing. This will provide the normal base load of electricity to the unit prior to occupier specific requirements.

## **Air source heat pumps**

These technologies provide the most suitable renewable technology for use to heat and cool the office areas. They are highly energy efficient, do not use fossil fuel and are low carbon emission.

### **4.1 Sustainability Strategy**

#### **1.4. Climate Change Resilience**

Flexibility is inherent in the design of the development's spaces to provide maximum flexibility for all potential occupiers.

The development will also be designed to adapt to the climate changes expected in the future. This will minimise the need for carrying out works to adapt the building in future (and therefore reducing wastage). Climate change adaptation measures include:

- The building will be designed to limit thermal overheating under climate change conditions by sizing the air source heat pumps to cope with predicted increases in temperature based on TRYs future climate change scenarios.
- The building fabric has been reviewed against the effects of Climate Change (Wst 05 credit targeted for BREEAM 2018NC), and found to be resilient and able to withstand with predicted increases in flood level, solar radiation, wind gusting, rainfall intensity and snow loading.
- Implementation of measures recommended by the drainage consultant will ensure that the site is not at significant risk of flooding. Surface water drainage strategy accounts for climate change
- Measures to reduce water consumption by 25% to account for decreased amounts of water available in the future (for details see Section 4.5).

These measures allow the development to reach Tritax Symmetry's own ambitions and requirements within the BREEAM targeted credits and exceeds the requirements included in Cherwell District council policy ESD 1.



## 1.5. Transport

A Transport Assessment has been prepared for the planning application by Vectos, which includes a review of the existing situation with regards to transport to and from the site, including by car, public transport, walking and cycling.

The site is located within bus corridors, cycle routes and will provide good quality, lit footways providing safe and convenient routes to the existing local network.

A Framework Travel Plan has also been prepared for the development by Vectos which includes measures proposed to further encourage the use of sustainable modes of transport. The development will provide secure cycle parking and cyclist facilities (showers and changing) in compliance with BREEAM Tra 01 requirements. The site will provide Electric Vehicle charging for 25% of car parking, with infrastructure to allow this to be extended to 100% of spaces.

Additional measures proposed in the Travel Plan include provision of information of employees on sustainable transport options and implementation of a car share scheme.

## 1.6. Ecology

Chapter 8 of the Environmental Statement sets out the ecological assessment which has been undertaken by EDP. Important habitats onsite include species-poor and species rich hedgerow and scattered mature broadleaved trees which are of low distinctiveness although these form part of notable habitat corridor throughout the site and with offsite habitats.

Mitigation measures have been proposed which will ensure no significant effects upon ecological features. This will include measures to restore and enhance the ecological value of existing hedgerows through a combination of initial interventions (e.g. gap planting) and sensitive long-term management (e.g. less frequent flailing of hedgerows). New habitats to be delivered as part of the Soft Landscape Scheme (SLS) include the following:

- New native trees and shrubs;
- New native hedgerow planting;
- New native woodland planting;
- New species-rich meadow grassland; and
- New wetland habitat.

The establishment and long-term management of these habitats will offset the losses to development and seek to result in an overall net gain in habitat of biodiversity value, as detailed in Technical Appendix 8.2 of the Environmental Statement.

## 1.7. Waste

### 1.7.1. Construction waste

The proposed development will seek to minimise waste as much as possible in line with the BREEAM efficiency benchmarks and will ensure that at least 70% of waste volume is diverted from landfill. This will be delivered through the creation of a project specific Resource Management Plan that covers on-site construction waste, off-site manufacturing waste and accurately records waste arisings and waste management practices.

### 1.7.2. Operational waste

A Waste Management Strategy has been developed by Tier for the planning application. Waste will be separated by the operator into recyclable waste streams for collection by a local licensed company. The development will have a dedicated waste storage area which includes sufficient provision for storage of recyclable waste streams. This area will be accessible to both building occupants and waste collection vehicles.

Cherwell District Council policy, ESD 3 Sustainable Construction, requires sustainable construction principles. This development's requirement to achieve BREEAM waste and recycling targets will exceed the policy objectives.

## 1.8. Water

The development will target a minimum 25% improvement in water consumption over the notional baseline, as prescribed by BRE which is based in industry research and is included as part of the BREEAM 2018 New Construction Methodology. To achieve this, low flush volume WCs and low flow rate taps / showers will be specified as part of the fitted-out scheme. Pulsed output water meters will also be installed to each building to enable occupiers to monitor their water consumption. By being able to easily monitor water usage, end users can target improvements and thereby are encouraged to reduce usage.

To reduce water wastage, major leak detection systems will be installed, and flow control devices will prevent minor leaks in WC areas and the development will minimise unregulated water consumption by specifying planting which does not rely on a permanent, mains fed irrigation system.

Improvement of water efficiency exceeds measures defined in the Cherwell District Council policies ESD 7 Sustainable Drainage Systems (SuDS) and ESD 8 Water Resources.

## 1.9. Materials

### 1.9.1. Sustainable Procurement

A Sustainable Procurement Plan (SSP) is in place to guide specification towards sustainable construction products. This document has been produced by Tritax Symmetry to guide and unify and embed Sustainable procurement across all of its developments. The plan is used by the design team to inform the planning proposals and is embedded in the Contractors requirements to ensure implementation. It is also audited as part of the BREEAM targeted credits.

All timber will be responsibly sourced. In addition, Contractors shall also source other materials responsibly (i.e. from suppliers with BES6001/ ISO14001 / CARES certification) and from local and recycled sources wherever possible to meet BREEAM Mat 04 targets.

The inclusion of an SSP plus audit and monitoring of the installed material's sourcing certifications as part of the BREEAM targets exceeds Cherwell District Council policy ESD 3 Sustainable Construction.

### 1.9.2. Durability

The development will be designed to be durable and resilient. This will help to reduce the need to repair and replace materials resulting from damage to exposed elements of the building and landscape. Additional protection has been added to areas of the building envelope that could be subject to vehicle collision and walls within the units subject to high pedestrian movements or internal vehicles or trolleys have additional protection added during end user fit out. This is monitored and audited through the BREEAM credit Mat 05.

Monitoring the procurement and specification of products through construction and the whole building life exceeds the requirements of policy ESD 3 Sustainable Construction.

## 1.10. Pollution

The issues associated with pollution category addresses the prevention and control of pollution and surface water run-off associated with the building's location and use. Issues in this section aim to reduce the building's impact on surrounding communities and environments arising from light pollution, noise, flooding and emissions to air, land and water. In line with Tritax Symmetry's commitment to achieve BREEAM certification various credits have been targeted which address reduction in various aspects of pollution. The targeted credits restrict construction ground, air and water pollution (Man 03) to the PPG3 requirements and the in-operation air ( Pol 01 & 02), water (Pol03), noise (Pol 05) and light pollution(Pol 04).

### 1.10.1. Air quality

An air quality assessment has been undertaken as part of the EIA (Chapter 6) which assesses both the impacts of the construction and operational phases upon air quality. The assessment concludes that with the mitigation measures proposed, there will be no significant effects of the development upon air quality.

### 1.10.2. Flood risk and Sustainable Drainage Systems

Implementation of measures recommended in the Flood Risk Assessment provided by Tier will ensure that the site is not at significant risk of flooding. This development will reduce the residual area of soft landscaping that is able to soak up water during a storm. Systems will be designed to hold the water onsite and safely release it into the surrounding watercourses without causing flooding offsite.

The Flood Risk Assessment outlines how this development incorporates prevention by using underground storage tanks with integrated flow control and associated attenuation holding ponds & swales. These systems will capture the rainwater run off and hold it on site, limiting the rate of discharge to local watercourses to avoid flooding adjacent land or properties.

### 1.10.3. Light pollution

Light pollution will be minimised through the use of timeclocks to switch off lighting when not needed and through ensuring external lighting is designed in compliance with the ILP Guidance notes for the reduction of obtrusive light (2011). This will reduce light pollution allowing benefits to nocturnal animals such as bats and will reduce unnecessary energy usage and the resulting carbon emissions.

### 1.10.4. Noise pollution

An assessment of noise has been undertaken as part of the EIA (Chapter 7). During construction, the Contractor will implement a Construction Environmental Management Plan (CEMP). This will include measures to reduce noise disturbance to nearby residents from construction activities by limiting operating times and acoustic outputs of construction plant.

To mitigate against operational noise, the proposals will include specification of a sound reduction for both the façades of the development, and the setting of a noise limit from all fixed plant at the site. The noise assessment concludes that there will be no significant effects of the scheme in relation to noise.

### 1.11. BREEAM

Tritax Symmetry are committed to deliver the development with a minimum of a BREEAM 'Very Good' rating and has therefore committed to various sustainability measures across the BREEAM categories.

In addition to meeting Tritax Symmetry's own sustainability aims, the achievement of various credits targeted will exceed a significant number of the sustainable goals in the Cherwell District Local Plan Review.

### 5.1 conclusion

This Sustainability Statement demonstrates how the proposed design of the development will address and exceed national and local planning policies, guidance and regulations and the low carbon agenda. The table below summarises the compliance with various policies:

| Policy Ref                                              | Policy Objective                                                                                                                                                                                                                                                                                         | Development Response                                                                                                                                                                                                                                                                |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ESD 1: Mitigating and adapting to climate change</b> | <ul style="list-style-type: none"><li>• Mitigate the impact of developments within the district on climate change.</li><li>• Design developments to reduce carbon emissions and use resources more efficiently.</li><li>• Promote the use of decentralised and renewable or low carbon energy.</li></ul> | <ul style="list-style-type: none"><li>• Met - BREEAM Wst 05 Climate Change Adaptation credit targeted</li><li>• Met- energy hierarchy used</li><li>• Met – BREEAM Ene04 Low Carbon Design credits targeted</li><li>• At least 18% available roof coverage PV installation</li></ul> |
| <b>ESD 2: Energy hierarchy and allowable solutions</b>  | <ul style="list-style-type: none"><li>• Promote an energy hierarchy.</li><li>• Reduce energy use through sustainable design and construction measures.</li><li>• Efficient and decentralised energy supply.</li><li>• Make use of renewable energy and allowable solutions.</li></ul>                    | <ul style="list-style-type: none"><li>• Met- energy hierarchy used</li><li>• Met – BREEAM Ene04 Low Carbon Design credits targeted</li><li>• At least 18% available roof coverage PV installation</li></ul>                                                                         |
| <b>ESD 3: Sustainable Construction</b>                  | <ul style="list-style-type: none"><li>• Achieve through a combination of fabric energy efficiency, carbon compliance and allowable solutions.</li><li>• All new non-residential development expected to achieve BREEAM Very Good certification.</li></ul>                                                | <ul style="list-style-type: none"><li>• Met – BREEAM Ene04 Low Carbon Design credits targeted</li><li>• Met – overall BREEAM Very Good targeted</li></ul>                                                                                                                           |

| Policy Ref                                         | Policy Objective                                                                                                                                                                                                                                                                                                                                                          | Development Response                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                    | <ul style="list-style-type: none"> <li>• The demonstration of the achievement of this standard should be set out in the energy statement.</li> <li>• All development proposals will be encouraged to reflect high quality design and high environmental standards demonstrating sustainable construction.</li> </ul>                                                      |                                                                                                                                                                                                                                                                                                               |
| <b>Policy ESD 4 – Decentralised Energy Systems</b> | <ul style="list-style-type: none"> <li>• The use of decentralised energy systems providing heating or heating and power will be encouraged in all new developments.</li> <li>• A feasibility assessment for DH/CHP including consideration of biomass fuelled CHP will be required for all applications for non-domestic developments above 1000m2 floorspace.</li> </ul> | <ul style="list-style-type: none"> <li>• Met – BREEAM Ene04 Low Carbon Design credits targeted, a Low Zero Carbon Feasibility Study will be produced and this will include assessment of feasibility of decentralised systems</li> </ul>                                                                      |
| <b>ESD 5: Renewable Energy</b>                     | <ul style="list-style-type: none"> <li>• Planning applications involving renewable energy development will be encouraged.</li> <li>• Feasibility assessment for the potential for significant on-site renewable energy provision is required for applications for non-domestic development above 1000m2 floorspace.</li> </ul>                                            | <ul style="list-style-type: none"> <li>• Met – BREEAM Ene04 Low Carbon Design credits targeted, a Low Zero Carbon Feasibility Study will be produced and this will include assessment of feasibility of renewable energy provision</li> <li>• At least 18% available roof coverage PV installation</li> </ul> |

| Policy Ref                                                                            | Policy Objective                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Development Response                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ESD 6: Sustainable Flood Risk Management</b>                                       | <ul style="list-style-type: none"> <li>• Development will only be permitted in areas of flood risk when there are no reasonably available sites in areas of lower flood risk and the benefits of the development outweigh the risk of flooding.</li> <li>• Opportunities sought to restore natural river flows and floodplains.</li> <li>• Buildings over or culverting of watercourses should be avoided and the removal of existing culverts will be encouraged.</li> </ul> | <ul style="list-style-type: none"> <li>• Met – BREEAM credit Pol 03 Flood and Surface Water Management credits targeted.</li> </ul>                                                                    |
| <b>ESD 7: Sustainable Drainage Systems</b>                                            | <ul style="list-style-type: none"> <li>• All developments will be required to use sustainable drainage systems for the management of surface water run-off.</li> </ul>                                                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>• Met – BREEAM credit Pol 03 Flood and Surface Water Management credits targeted.</li> </ul>                                                                    |
| <b>ESD 8: Water Resources</b>                                                         | <ul style="list-style-type: none"> <li>• The Council will seek to maintain water quality and ensure adequate water resources and promote sustainable water use.</li> </ul>                                                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>• Met- the building fit out will include low water using sanitaryware, water meters and water leak detection to minimise water use wherever possible</li> </ul> |
| <b>ESD 10: Protection and enhancement of biodiversity and the natural environment</b> | <ul style="list-style-type: none"> <li>• A net gain in biodiversity will be sought in proposals by protecting, managing, enhancing and extending existing resources and by creating new resources.</li> </ul>                                                                                                                                                                                                                                                                 | <ul style="list-style-type: none"> <li>• Met – biodiversity net gain demonstrated in Appendix 8.2 of the Environmental Statement</li> </ul>                                                            |



## Appendix A – Applicable Sustainability policies

### A. National Planning Policy Framework

A revised National Planning Policy Framework (NPPF) was updated and published in July 2021 which sets out the government's planning policies for England and how they are expected to be applied. This framework replaces that published in February 2019. This framework confirms in section 2. Achieving Sustainable Development that:

*'the purpose of the planning system is to contribute to the achievement of sustainable development.'*

This highlights sustainability as a critical issue that runs throughout all of the planning policies. The National Planning Policy Framework (NPPF) defines sustainable development in agreement with the U.N. definition of "meeting the needs of the present without compromising the ability of future generations to meet their own needs". The NPPF outlines how three overarching objectives need to be pursued in mutually supportive ways in order to achieve sustainable development. These objectives are outlined below:

- 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.
- 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 pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

At the heart of the Framework is a 'presumption in favour of sustainable development' ,

### B. The Cherwell Local Plan 2011-2031

The Cherwell Local Plan is the adopted development plan for Cherwell District. The following policies from the current adopted plan are relevant:

#### Cherwell District Council's Strategic Objective

*Objective SO II:* To incorporate the principles of sustainable development in mitigating and adapting to climate change impacts including increasing local resource efficiency, minimising carbon emissions, promoting decentralised and renewable or low carbon energy and ensuring that the risk of flooding is not increased.

Cherwell District will become Carbon Neutral by 2030 ahead of the Government target of Net Zero Carbon 2050. To support this target the council will:

- Ensure their own operations and activities are net zero by 2030.
- Do their part to achieve a net zero carbon district by 2030 and lead through example.

### **Policy PSD 1 – Presumption in favour of Sustainable Development.**

- The National Planning Policy Framework (NPPF) requires Local Plans to be based upon and reflect the presumption in favour of sustainable development, with clear policies that will guide how the presumption should be applied locally.
- When considering development proposals, the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work proactively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.

### **Policy ESD 1 – Mitigating and Adapting to Climate Change**

- Measures will be taken to mitigate the impact of development within the District on climate change.
- The incorporation of suitable adaptation measures in new development to ensure that development is more resilient to climate change impacts will be taken into account.
- Adaptation through design approaches will be considered in more locally specific detail in the Sustainable Buildings in Cherwell Supplementary Planning Document.

### **Policy ESD 2 – Energy Hierarchy and Allowable Solutions**

- In seeking to achieve carbon emission reductions, the council will promote an energy hierarchy as follows:
  - Reducing energy use, in particular by the use of sustainable design and construction measures.
  - Supplying energy efficiently and giving priority to decentralised energy supply.
  - Making use of renewable energy
  - Making use of allowable solutions.

### **Policy ESD 3 – Sustainable Construction**

- All new non-residential development will be expected to meet at least BREEAM 'Very Good' certification with immediate effect. The demonstration of the achievement of this standard should be set out in the Energy Statement.
- The strategic site allocations identified in the Local Plan are expected to provide contributions to carbon emissions reductions and to wider sustainability.
- All development proposals will be encouraged to reflect high quality design and high environmental standards, demonstrating sustainable construction methods.

### **Policy ESD 4 – Decentralised Energy Systems**

- The use of decentralised energy systems providing heating or heating and power will be encouraged in all new developments.
- A feasibility assessment for DH/CHP including consideration of biomass fuelled CHP will be required for all applications for non-domestic developments above 1000m<sup>2</sup> floorspace.

### **Policy ESD 5 – Renewable Energy**

- The Council supports renewable and low carbon energy provision and the benefits of renewable energy schemes will be a material consideration in determining planning applications.
- A feasibility assessment of the potential for significant on-site renewable energy provision will be required for all applications for non-domestic developments above 1000m<sup>2</sup> floorspace.
- Where feasibility assessments demonstrate that on-site renewable energy provision is deliverable and viable this will be required as part of the development unless an alternative solution would deliver the same increased benefit.

### **Policy ESD 6 – Sustainable Flood Risk Management**

- The Council will manage and reduce flood risk in the District through using a sequential approach to development; locating vulnerable developments in areas at lower risk of flooding.
- Safeguarding floodplains from development, opportunities will be sought to restore natural river flows and floodplains, increasing their amenity and biodiversity value.
- Building over or culverting of watercourses should be avoided and the removal of existing culverts will be encouraged.
- Existing flood defences will be protected from damaging development and where development is considered appropriate in areas protected by such defences it must allow for the maintenance and management of the defences to be designed to be resilient to flooding.

### **Policy ESD 7 – Sustainable Drainage Systems (SuDS)**

- All developments will be required to use sustainable drainage systems (SuDS) for the management of surface water run-off.
- When considering SuDS the need to protect ground water quality must be taken into account, especially where infiltration techniques are proposed.

### **Policy ESD 8 – Water Resources**

- The Council seeks to maintain water quality, ensure adequate water resources and promote sustainability in water use.
- Water quality will be maintained and enhanced by avoiding adverse effects of development on the water environment.
- Development will only be permitted where adequate water resources exist or can be provided without detriment to existing uses.

### **Policy ESD 10 – Protection and Enhancement of Biodiversity and the Natural Environment**

- Protection and enhancement of biodiversity and the natural environment will be achieved by the following measures; net gain in biodiversity, protection of trees, reuse of soil, habitat and air quality assessments and refusal to applications which will result in adverse impacts to the natural environment.



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