

Sustainability and Energy Statement

Land West of Westbury Road, Warminster,
Wiltshire

November 2025



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Client

BDW Trading Ltd

Turley Reference

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1. Introduction

This Sustainability and Energy Statement has been prepared to demonstrate the sustainability credentials of the development proposals for Land West of Westbury Road, Warminster, Wiltshire.

1.1 Introduction

This Sustainability and Energy Statement has been prepared by Turley Sustainability & ESG, on behalf of BDW Trading Ltd (the 'Applicant') to support an outline planning application for the development of up to 205 homes at Land West of Westbury Road, Warminster, Wiltshire (the 'Site').

This statement provides a summary of the sustainable design measures incorporated into the proposals and those to be considered during the detailed design of new homes to ensure suitable levels of sustainability performance in accordance with local and national planning policy.

1.2 Site Context

The Site is located to the northwest edge of the existing settlement of Warminster, approximately 1.8km from the town centre. The Site is approximately 10.45ha in size, comprising a mosaic of agricultural fields with existing hedgerows forming field boundaries. It is bounded to the north by agricultural fields, to the east by Westbury Road, to the west by the train line and to the south by existing residential development.

1.3 Proposed Development

The Proposed Development includes up to 205 homes inclusive of 30% affordable housing, recreational space including a children's play area, public open space, allotments, sustainable drainage, landscaped areas, potential community hub and new proposed roads and connected footpath routes.

The description of development is as follows:

"Erection of up to 205 no. dwellings, community hub, public open space, access, infrastructure and associated works, with all other matters reserved".

The Illustrative Masterplan is shown in **Figure 1**.

1.4 Document Structure

Chapter 2 of this report provides an overview of relevant national and local legislation, planning policy, and guidance.

Chapter 3 provides detail of the sustainability and energy strategy of the proposed development.

Chapter 4 provides an overall summary.

Please note, the terms "carbon", carbon dioxide (CO₂)" and "greenhouse gas (GHG)" are used interchangeably in this statement depending on the terminology of referenced documents.

Figure 1: Illustrative Masterplan (Source: Focus On Design)



2. Policy Context

This chapter provides an overview of the relevant sustainability planning policy and guidance from a national and local perspective.

2.1 National Policy

This section sets out a summary of current national guidance and policy in relation to sustainable development.

2.1.1 National Planning Policy Framework

The National Planning Policy Framework ¹(NPPF) provides a framework for the development of locally prepared plans and the government's planning policies for England and how these are expected to be applied.

Paragraph 8 outlines the environmental objective of the Framework which includes mitigating and adapting to climate change and moving to a low carbon economy.

Paragraph 161 similarly confirms that the planning system should support the transition to a low carbon future in a changing climate, including providing support to proposals which contribute to radical reductions in greenhouse gas emissions and encourage the reuse of existing resources, as well as the development of low carbon energy.

Paragraph 164 expects new development to be planned for in ways that avoid increased vulnerability to the range of impacts arising from climate change, ensuring that suitable adaptation measures are provided where development is located in a vulnerable area.

Paragraph 166 of the Framework states that new development should:

- Comply with adopted Local Plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that this is not feasible or viable; and
- Take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption.

Paragraph 167 states that LPAs should prioritise supporting energy efficiency and low-carbon heating improvements, such as installing heat pumps and solar panels, for both domestic and non-domestic buildings.

The NPPF recognises the role planning has to play in support of the UK's pursuit of the United Nations Sustainable Development Goals² (UNSDGs) which address social progress, economic wellbeing and environmental protection. Example UNSDGs are presented in **Figure 2**.



Figure 2: Example UN Sustainable Development Goals

¹ [UK Government | NPPF](#)

² [UN Sustainable Development Goals](#)

2.1.2 Planning Practice Guidance

Planning Practice Guidance (PPG) provides further advice on various planning issues associated with development, including those linked to sustainability and renewable energy and underpins the policies within the NPPF.

PPG is a material consideration in planning decisions and should generally be followed unless there are clear reasons not to. It sets out how local authorities should include policies that protect the local environment and strategies to mitigate and adapt to climate change and supports developments that are functional and adaptable for the future.

2.1.3 National Design Guide

The National Design Guide published in October 2019 and is based on the national planning policy practice guidance and objective for good design as set out in the NPPF. The Guide introduces ten characteristics of well-designed places which work together to create developments Character and Community, while positively addressing environmental issues affecting climate.

2.1.4 Futures Homes Standard (FHS)

Whilst not planning policy, the Building Regulations (and specifically Approved Document Part L: Conservation of Fuel and Power) set out the requirements for energy and carbon performance in new buildings. Periodic updates to these national regulations will drive energy efficiency and carbon reduction improvements.

Part L, Conservation of Fuel and Power - On 15th June 2022, the Building Regulations were updated as an interim step towards part of the roadmap to the 'full' Future Homes Standard. The regulations aim to deliver buildings that are of a higher quality, with lower energy bills and reduce GHG emissions by around 30% for new homes and 27% for non-domestic buildings.

In December 2023 the Government published the Future Homes Standard (FHS) consultation. The

FHS, which is expected to come into force in 2025, will require homes to achieve a c.75% reduction in carbon emissions beyond Part L 2013. Homes will be 'zero-carbon ready', meaning that they will need no retrofitting to produce zero carbon emissions as the electricity grid decarbonises. Fabric standards will closely resemble the fabric standards in the 2021 Part L uplift to the Building Regulations.

For dwellings, two options are currently being consulted on:

- **Option 1:** High efficiency solar PV panels covering 40% of ground floor area (equiv.), airtightness of 4 m³/m².h @ 50Pa, wastewater heat recovery, and decentralised mechanical extract ventilation (dMEV).
- **Option 2:** No renewable energy, airtightness of 5 m³/m².h @ 50Pa, no wastewater heat recovery, and natural ventilation with intermittent extract fans.

On June 6th 2025, the Government published a press release; *Rooftop solar for new builds to save people money* - GOV.UK³ stating that the FHS will require Solar PV. This is not a formal policy statement however provides a clear indication of the content of the final standard.

In 2022 the government also announced two new Building Regulations which took effect in June of that year, Part S and Part O.

Part S, Infrastructure for Charging Electric Vehicles - **Part S** sets out guidance for electric vehicle (EV) charging infrastructure. For residential development, EV charge points must be provided for each dwelling (or where the total number of parking spaces is less than each dwelling, all spaces should be provided with an active EV charging point). Any remaining spaces must have cable routes for charge points to be installed.

Part O, Overheating - **Part O** sets out new requirements for mitigating overheating in residential buildings, specifying that residential developments must limit unwanted solar gains in

³ <https://www.gov.uk/government/news/rooftop-solar-for-new-builds-to-save-people-money>

the summer and provide means to remove heat. Compliance with **Part O** can be demonstrated using two methods, either following a simplified prescribed glazing and free area ratio or using Dynamic Simulation Modelling to demonstrate the risk of overheating from rising summer temperatures has been mitigated.

2.1.5 Environment Act 2021

The Environment Act 2021⁴ aims to improve air and water quality, protect wildlife, increase recycling and reduce plastic waste.

The Environment Act explicitly makes Biodiversity Net Gain (BNG) a condition of planning permission, requiring all new developments in England for 10 or more homes to provide a 10% BNG, with the same rules applying to small sites from April 2024.

2.2 Local Policy

2.2.1 Adopted Wiltshire Core Strategy

Adopted in January 2015, the Wiltshire Core Strategy⁵ sets out the strategic vision for delivering sustainable growth over the period up to 2026. The key sustainability policies relevant to this development are summarised below.

Core Policy 41, Sustainable construction and low-carbon energy - requires design measures to be incorporated into new developments to reduce energy demand. Development will be well insulated and designed to maximise natural ventilation and natural light and heat from the sun.

New homes are required to achieve at least Level 4 (in full) of the Code for Sustainable Homes (CfSH), however the CfSH was withdrawn in 2016.

All proposals for major development will be required to submit a Sustainable Energy Strategy outlining the low-carbon strategy for the proposal.

Core Policy 43, Providing Affordable Homes – states that on sites of five or more dwellings, provision will be made for 30% affordable housing.

Core Policy 50, Biodiversity and Geodiversity – requires development proposals to demonstrate how they protect features of nature conservation and geological value. Measures will be incorporated to avoid and reduce disturbance of sensitive wildlife species and habitats.

Developments should seek to enhance biodiversity. Major developments must include measures to deliver biodiversity gains through opportunities to restore, enhance and create valuable habitats, ecological networks and ecosystem services.

Developments will avoid direct and indirect impacts upon local sites through sensitive site location and layout, and by maintaining sufficient buffers and ecological connectivity with the wider environment.

Core Policy 52, Green infrastructure Development – requires development to make provision for the retention and enhancement of Wiltshire's green infrastructure network, and ensure that suitable links to the network are provided and maintained.

Core Policy 57, Ensuring High Quality Design and Place Shaping – requires new developments to make a positive contribution to the character of Wiltshire through a range of measures including:

- The retention and enhancement of existing important landscaping and natural features;
- Maximising opportunities for sustainable construction techniques, use of renewable energy sources and ensuring buildings and spaces are orientated to gain maximum benefit from sunlight and passive solar energy;
- Making efficient use of land whilst taking account of the characteristics of the site and the local context;
- Ensuring that the public realm, including new roads and other rights of way, are legible, safe and accessible;
- Taking account of the needs of potential occupants; and
- The use of high standards of building materials, finishes and landscaping.

⁴ [Environment Act 2021](#)

⁵ [Adopted Wiltshire Local Plan Core Strategy \(2015\)](#)

Core Policy 60, Sustainable Transport – aims to reduce the need to travel particularly by private car, and support and encourage the sustainable, safe and efficient movement of people and goods within and through Wiltshire.

Core Policy 61, Transport and new development – requires new developments to be located and designed to reduce the need to travel particularly by private car, and to encourage the use of sustainable transport alternatives.

Core Policy 64, Demand management – requires demand management measures to be promoted to reduce reliance on the car and encourage the use of sustainable transport alternatives. Measures include opportunities for car charging and the development of appropriate smarter choices measures to influence people's travel behaviour towards sustainable travel options through travel plans, personalised travel planning, car sharing and information and marketing campaigns.

Core Policy 67, Flood Risk – states that all new developments will include measures to reduce the rate of rainwater run-off and improve rainwater infiltration to soil and ground (SuDS).

2.2.2 New Wiltshire Local Plan (2020 – 2038)

Wiltshire Council is preparing a new local plan⁶, which is currently under review by the Secretary of State. The key sustainability policies are set out as per the below:

Policy 4 Addressing climate change – requires development proposals to support a move to carbon neutrality and adaptation to climate change, in the following ways:

- Minimising carbon emissions, including by:
 - being located to reduce the need to travel and optimise the opportunities to access services and make trips by sustainable and active modes of transport;
 - contributing to increasing use of active travel in between neighbourhoods that reduces demand for private vehicle use

- adopting the principles of the energy hierarchy as well as delivering energy efficient buildings and developments that are fit for purpose and adaptable over time thereby reducing the need for redevelopment and unnecessary waste
- taking opportunities to generate, incorporate and connect to renewable and low carbon energy infrastructure wherever feasible; and
- adopting the principles of the circular economy to reduce consumption of finite resources, reduce waste and maximise recycling.
- Maximising carbon storage and sequestration, including by:
 - providing, conserving, enhancing and restoring habitats and the connectivity of the green and blue infrastructure, in order to provide a carbon storage function in order to provide a carbon storage function;
 - incorporating green and blue infrastructure, such as trees and woodland, to help to sequester carbon from the atmosphere; and
 - minimising the loss, degradation and erosion of soils and enhancing soil structure wherever possible.
- Mitigating and adapting to the impacts of climate change, including by:
 - managing flood risk from all sources associated with higher peak river flows, groundwater fluctuations and surface water associated with more extreme weather events;
 - ensuring infrastructure is resilient to the impacts of climate change such as overheating, flooding, drought, storms;
 - providing comprehensive and multi-functional sustainable drainage systems (i.e. incorporating the four pillars of SuDS design) to serve all new development, including grey water harvesting and use;
 - creating places that positively promote social inclusion, interaction and well-being

⁶ [Wiltshire Local Plan Pre-Submission Draft 2020 - 2038](#)

to help ensure that communities are more resilient to challenges such as climate change;

- delivering biodiversity net gain that meaningfully contributes towards buffering and tackling the effects associated with a changing climate; and
 - incorporating appropriate water efficiency and water recycling measures to help reduce energy demand, reduce abstraction and contribute towards reducing the impact of nutrients on the catchment of the River Avon SAC.
- Proposals for new development will be required to demonstrate through a Sustainable Energy Statement:
 - how it will take account of embodied carbon, contribute to mitigating and adapting to climate change and to meeting targets to reduce carbon dioxide emissions having regard to the above criteria.

Policy 85 Sustainable construction and low carbon energy – requires new built residential to achieve a zero-carbon in operation standard, by significantly reducing heat and power demand through energy efficient design and/or modern methods of construction. The remaining energy demand should then be supplied through onsite renewables. Proposed new dwellings will demonstrate the following:

- space heating demand less than 30kWh/m²/annum;
- total energy use less than 40kWh/m²/annum;
- on site renewable energy generation to match the total energy use, with a preference for roof mounted solar PV, subject to building orientation and heritage considerations;
- and connection to a district heating network where one is available.

Policy 87 Embodied carbon - Proposals for major residential development will need to be supported by an Embodied Carbon Assessment that demonstrates a score of less than 900kgCO₂/sqm of

carbon can be achieved within the development of the substructure, superstructure, and finishes.

2.2.3 Waste Core Strategy

Adopted in 2009, the waste core strategy⁷ sets out the spatial vision, key objectives and overall principles for development covering the provision of sustainable waste management facilities up to 2026.

WCS6: Waste Reduction and Auditing – The policy requires developments providing 10 or more dwellings to design and provide facilities for occupiers to recycle / compost waste and / or facilities within individual or groups of properties for the separation and storage of different types of waste for recycling and / or composting.

2.2.4 Climate Emergency

In 2019 Wiltshire Council declared a climate emergency and ambition to become carbon neutral by 2030. The Council has stated that carbon reduction will be an integral theme of the Local Plan review. Most recently the Council pledged to deliver zero carbon Council homes.

2.3 Summary

Both local and national policy aims to ensure the delivery of sustainable and well-designed homes which mitigate and adapt to the impacts of climate change.

Nationally, changes to the Building Regulations as a result of the Future Homes Standard will require development to reduce carbon emissions over time, with homes needing to achieve at least 75% from 2025. The Government's December 2023 consultation confirms that homes which meet the FHS will be Net Zero Ready.

The current Wiltshire Local Plan supports sustainable development including sustainable construction practices, waste reduction, flood risk and sustainable transport, while the emerging Local

⁷ [Wiltshire Waste Core Strategy \(2006 - 2026\)](#)

Plan aims to provide an enhanced set of climate change policies.

The following sections of this Sustainability and Energy Statement set out the sustainability measures to be incorporated into the design of the development to ensure the delivery of a sustainable development and addressing the requirements of local and national policies.

3. Sustainability at Land West of Westbury Road, Warminster

This section summarises the sustainability and energy strategy for the Proposed Development at Land West of Westbury Road, Warminster, Wiltshire.

This section of the report outlines the sustainability and energy strategy for the Proposed Development at Land West of Westbury Road, Warminster, Wiltshire, demonstrating how the development responds to both national and local planning policy, including, the NPPF.

In this context the sustainable design measures incorporated into the development masterplan at the outline application stage and measures to be considered during the detailed design are set out under the following headings which reflect the themes of the NPPF.

3.1 Building a Strong and Competitive Economy

3.2 Promoting Sustainable Transport

3.3 Requiring Good Design

3.4 Promoting Healthy Communities

3.5 Meeting the Challenge of Climate Change

3.6 Conserving and Enhancing the Natural Environment

3.7 Sustainable Resources

3.8 Waste Management

3.1 Building a Strong and Competitive Economy

The Proposed Development will contribute to positive economic growth for the district through construction and occupation, providing sustainable new homes, supporting the aims of the NPPF.

Construction - The economic benefits of construction are well known with considerable direct and indirect positive impacts resulting from new residential construction.

A study by the Confederation of British Industries (CBI) in February 2020⁸⁸ demonstrates that construction projects have a significant benefit on the local and wider economy. The report concludes that for every £1 of construction expenditure £2.92 is injected into the economy.

The construction of up to 205 new homes will therefore provide opportunities for local employment as well as increased revenue locally for materials, services and goods.

In addition, as part of the development, provision of a financial contribution to the Council to support local infrastructure projects will be made.

Occupation – Further positive economic impacts of the Proposed Development resulting from the occupation of new homes and related increase in local population are noted as follows;

- The construction of up to 205 new homes will increase the population resulting in local benefits through the demand for goods and services;

⁸⁸ <https://www.cbi.org.uk/media/4121/fine-margins-february-2020-cbi.pdf>

- The increase in local population will also help support local facilities and businesses; and
- The development of new homes will provide an increase in Council Tax revenue helping support local Council services.

3.2 Promoting Sustainable Transport

A Transport Statement and a Framework Travel Plan have been prepared by Pegasus Group, summarising existing conditions in the vicinity of the Site, the accessibility of the Site relative to local facilities and services and outlines the development proposal.

This section of the report provides a summary of the sustainable access and transport measures available and incorporated into the development.

Walking/Cycling Services – Existing pedestrian facilities are provided on a minimum of one side of the local roads, offering direct and continuous routes between the Site and local services and amenities. Dropped kerbs are in place at crossings, with street lighting provided along the route between the Site and Warminster town centre.

There are several existing Public Right of Ways (PRoW) in the vicinity of the Site, including WARM16 (c.200m south of the Site) and WARM21 which provides a pedestrian and cycle connection between Copheap Lane and Warminster Railway Station.

National Cycle Network (NCN) Route 24 is located approximately 2.5km southwest of the Site centre, providing links locally to Frome and Salisbury.

Local Services and Amenities - The Transport Statement indicates the proximity of the Site to key services and amenities, largely associated with the local centre of Warminster. Warminster has a range of community and recreational facilities including nurseries, schools, a college, a sports centre, doctor's surgeries, a community hospital, dentists, pharmacies, opticians and a shopping centre. A range of shops, bars and restaurants are found within Warminster as well as several areas of public open spaces.

These facilities are considered to be within walking and cycling distance of the Site. A summary of the journey times to each amenity is found within the Transport Statement accompanying this application.

Bus Services – The closest bus stops to the Site, served by the D1 bus service, are located adjacent to the south-eastern corner of the Site on Westbury Road (c.300m from the centre of the Site). The D1 service provides hourly links to Warminster town centre and across Wiltshire and part of Somerset.

The Market Place bus stops within Warminster town centre, located approximately 1.6km south from the Site, provide access to additional services, including the 50, 53, 56, 82, and 89. The Market Place stops can be accessed via the D1 service (c.4 minutes), a 20-min walk or a 6-min cycle.

A summary of the current bus routes and services are listed in **Table 1**.

Table 1: Bus Routes and Services

Service	Destinations	Frequency
D1	Bath / Salisbury	Approx. hourly Monday to Sunday
50A	Warminster Market Place – Warminster the Mead	Hourly weekdays
X53	Warminster / Frome	Daily
56	Warminster / Salisbury	One service per day on Tuesday and Friday only
82	Warminster / Mere	One service per day on Friday only
89	Mere - Trowbridge	One service per day on Friday only

Rail Services – Warminster Railway Station is located approximately 2km to the south of the Site which can be reached via a 20-minute walk, a 6-minute cycle, or via Bus D1 and 50A. Facilities at the station include 16 cycle storage spaces and 60 car

parking spaces. The station provides regular direct services to Cardiff Central, Portsmouth, Worcester and Yeovil.

Electric Vehicle Charging – All dwellings will be provided with one electric charging point in accordance with Building Regulations Part S.

Proposed Development - To facilitate sustainable travel, the development will be designed to prioritise pedestrians and cyclists, through provision of the following:

- Pedestrian access will be provided via a continuation of the footway on the western side of Westbury Road which will route into the Site via the southern access junction;
- Refuge islands will be provided to allow pedestrians and cyclists to cross the Westbury Road carriageway and access the shared footway/cycleway and southbound Westbury Road bus stop;
- The internal layout will be designed to constrain vehicular speeds; and,
- Infrastructure for a rapid charging EV charging point within the Site.

Furthermore, the Framework Travel Plan outlines measures to promote sustainable travel among future residents, including the distribution of travel information leaflets, provision of bus taster tickets and promotion of a car-sharing platform.

It is concluded that the proposed development is suitably located with appropriate existing and proposed walking, cycling and public transport facilities that provide opportunities for residents to travel to and from the Site by sustainable travel modes. This is in line with current Local Plan **Core Policy 60, 61, 64** and emerging Local Plan **Policy 4**.

More detailed information on transportation issues is contained in the Transport Statement and Framework Travel Plan that accompany the planning application.

3.3 Requiring Good Design

The design of the development at Land West of Westbury Road, Warminster aims to respond to the

site-specific constraints and includes sustainable elements, to create a well-designed development in line with sustainability principles set out in current Local Plan **Core Policy 57**. It will include:

- Development located within walking or cycling distance of existing facilities and services;
- Creation of 'open space' with community facilities such as allotments and play area;
- A series of well-overlooked streets and play areas to provide passive surveillance and feelings of safety, coupled with private gardens and outdoor spaces;
- New and improved landscape buffer around the boundary and protection of hedgerows and trees as well as additional planting and green corridors;
- Inclusion of sustainable drainage features; and,
- Energy efficiency, water efficiency and renewable energy measures and targets as detailed in **Section 3.5**.

Further details on how the design of the development has evolved to incorporate a range of good design measures are set out in the Design and Access Statement (DAS) which accompanies the application.

3.4 Promoting Healthy Communities

Creating a high-quality development that promotes health and wellbeing for residents and local people is a key aim of the scheme. In this context the design has been developed incorporating a number of features to enhance the health and wellbeing of the residents, including:

- Creation of 'open space' which includes amenity green space, play area, Sustainable Drainage System/ponds, woodland buffer and additional planting and allotments;
- A series of strategic leisure footpaths and cycleways; and
- The encouragement of activity, leisure and social interaction to enhance both physical and mental wellbeing of the future population.

In addition the design of new homes will consider measures to improve internal living environments to promote health and wellbeing including:

- Prioritisation of natural ventilation, contributing to good internal air quality;
- Homes which are adaptable for the future; and,
- Utilisation of materials and services that have low emission rates and pollutants.

More information on how the development has incorporated healthy living opportunities is contained within the DAS which accompanies the outline planning application.

3.5 Meeting the Challenge of Climate Change

One of the main challenges facing the UK and new development is the need to mitigate and adapt to a changing climate. The Government is committed to tackling climate change and in 2019 set out an ambition to extend the UK Carbon reduction target to reduce carbon emissions by 100% by 2050.

Climate change will cause the UK to become warmer, winters will become wetter, and summers will become drier. Adapting to this changing climate will impact on the design, construction, location, cost and operation of all new buildings in the next few decades. One of the NPPF's core planning principles is for development to consider climate change adaptation and mitigation during the planning process.

In 2023 the Government published the next stage of the FHS and FBS consultation which will require homes to reduce carbon emissions by 75% beyond Part L 2013. The Government has confirmed that from 2025 no fossil fuels will be used, and new homes will be Net Zero Ready.

The Council's Local Plan Core **Policy 41 and 57** support the Government's objectives for sustainable development, reducing energy use and carbon emissions, adapting to and mitigating the effects of climate change.

In this context the following sections outline the key climate change mitigation and adaptation measures

considered appropriate for this development based on the latest national guidance.

3.5.1 Mitigating Climate Change

Reducing Construction Stage Emissions -

Research by the Target Zero group in 2012 assessed the whole life carbon of a range of building types, including homes and typical non-residential development.

A selection of the results shown in **Figure 3** demonstrate that the carbon emissions from the 'Product', the embodied carbon of materials' makes up a significant proportion of a buildings carbon emissions, for homes almost half of the embodied carbon is emitted through construction.

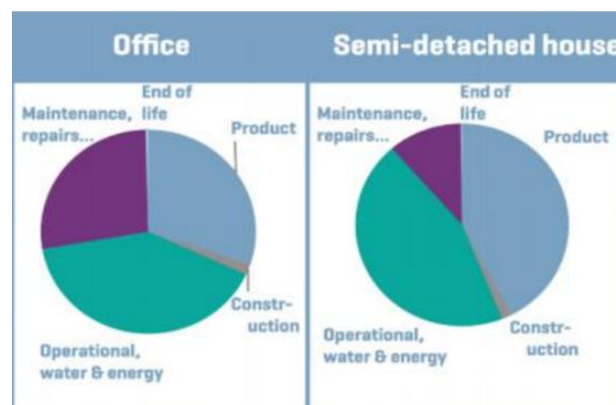


Figure 3: Carbon emissions breakdown

Designing development to minimise construction stage emissions and the embodied carbon of development can therefore make a substantial contribution to reducing GHG emissions.

As the energy efficiency of buildings improves through the introduction of new building standards, the construction stage emissions become increasingly significant. Construction stage emissions include:

- GHG emissions associated with the construction of buildings;
- The embodied carbon of materials used in the construction of buildings; and
- Emissions associated with the transportation of construction stage waste.

As part of the detailed design process consideration will be given to measures to reduce the upfront

embodied carbon of the development, supporting the emerging Local Plan **Policy 87**. This will include consideration of:

- Lean design to minimise materials use;
- Use of natural materials which sequester carbon such as timber;
- Specification of low carbon materials, for example steel and concrete with recycled materials content;
- Use of local supplies and labour where feasible; and
- The use of Modern Methods of Construction (MMC) including off-site prefabrication of building elements.

The use of MMC and prefabricated building elements can have a significant impact on reducing embodied carbon, with studies suggesting that MMC can reduce carbon by 45% compared to traditional methods of construction.

Reducing Operational Stage Emissions -

Developing energy efficient, low carbon buildings is a key objective of national policy and the recent updates to the Building Regulations to support the reduction of energy demand through efficient building design to reduce carbon emissions. The Council's current Local Plan, particularly **Core Policy 41 and 57** promote increasing the energy efficiency of homes.

The Government's net zero trajectory for new development is set through updates to the Building Regulations and the implementation of the FHS. The aim of these updates is to achieve a c.75% carbon reduction beyond Part L 2013 and deliver buildings which are Zero Carbon Ready, requiring no future renovations to be net zero, and allowing building occupants to operate fully net zero through the purchase of certified renewable electricity.

Given the outline nature of the proposal it is anticipated that by the time construction starts on site development will be required to meet the requirements of the FHS.

To meet the requirements of the FHS buildings will be designed in accordance with the energy hierarchy, as shown in **Figure 4**, which aims to reduce energy demand through passive design measures and a fabric first approach before utilising low carbon energy and the production of on-site renewable energy.

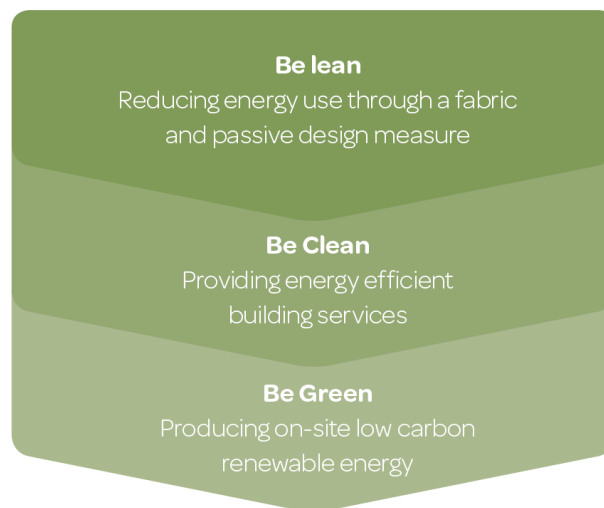


Figure 4: The Energy Hierarchy

The following sections set out the measures to be considered to deliver an energy efficient, low carbon development.

Be Lean – Reducing Energy Use

The first **“Be Lean”** stage of the energy hierarchy seeks to minimise the demand for heat and power from the outset through a highly-insulated building envelope and passive design measures.

This approach has several benefits including carbon savings being ‘locked-in’ for the lifetime of the building (60 years or more) rather than the shorter lifespan of renewable energy technologies. There are also virtually no maintenance and/or replacement requirements or costs and no reliance on occupant behaviour.

The FHS will significantly change how homes will be designed, favouring an all-electric strategy taking advantage of continued decarbonisation of the electricity network.

As part of the detailed design of the new homes a range of passive and active design measures will be

considered to reduce energy use and carbon emissions.

Fabric Efficient Development -

The detailed design of development will give consideration to a range of fabric and passive design measures including:

- Design and layout to optimise passive solar gain, natural daylight, sunlight and ventilation;
- Consideration given to designing homes to have a reduced form factor;
- Enhanced fabric specification to include building elements with U-values which go beyond the minimum requirements of the Building Regulations 2021;
- Design of building joints to reduce thermal bridging to help reduce air tightness, following the principles of Passive House design;
- Optimise natural daylight in habitable spaces via suitable window sizes relative to living spaces and bedrooms whilst limiting overheating risk through appropriate glazing specification;
- Prioritise passive cooling options such as external shading;
- Material selection which aims to balance the aesthetics, robustness and durability with optimal thermal benefits for each home.

Active Design -

Additional 'active' measures can further enhance the energy efficiency of the homes and reduce carbon emissions. In line with an all-electric based systems for building services, measures that will be explored as a part of the detailed design of homes include:

- 100% low energy lighting (e.g. LED);
- Use of heat recovery opportunities such as Waste Water Heat Recovery (WWHR) and Mechanical Ventilation with Heat Recover (MVHR);

- Use of PV diverters allowing surplus energy from PV to be diverted into hot water cylinders in homes;
- Potential for battery storage systems to help manage on-site energy generation and usage;
- Installation of smart metering systems to enable use of smart appliances, renewable energy and storage systems; and
- Where specified, use of low energy appliances.

The provision of active and passive fabric and energy efficient design homes will reduce baseline energy demand, over time reducing the energy intensity of development.

Be Clean – Efficient Energy

The next stage of the Energy Hierarchy is the efficient supply of heat and energy. This means connecting into an existing District Heating Network (referred to as "DHN" hereafter) where possible or providing an on-site communal heat network or individual systems.

District Heating Networks comprise a centralised heat generator, typically a gas fired Combined Heat and Power (CHP) engine. CHP systems generate electricity and waste heat which can be fed into a network of insulated pipes which deliver low carbon heat to buildings to provide heating and hot water via individual heat transfer units. There are no known heat networks in the vicinity of the proposed development.

The continued decarbonisation of the national electricity network and changes to the Building Regulations mean that the carbon emission benefits of traditional CHP systems will diminish during their life cycle.

CHP and DHN are therefore unlikely to be incorporated, as carbon emissions associated with electricity are expected to continue to reduce as the grid decarbonises, leading to greater savings in carbon emissions over the lifetime of the development.

The application of CHP and DHN is more appropriate for non-domestic buildings with high heat demands.

Small scale, thermally efficient new homes do not require a significant heating demand, which is better provided via heat pump systems. Due to the small size and thermal efficiency of the proposed multifunctional community space the application of CHP/DHN is also not appropriate.

In this context the provision of a heat network is not proposed at this Site.

Be Green – Low Carbon Renewable Energy

The final stage of the Energy Hierarchy is the generation of on-site low carbon and/or renewable energy to provide a further reduction in carbon emissions.

An initial review of potential low carbon renewable energy technologies which may be suitable for inclusion in the design of the homes and multifunctional space has been completed to reduce carbon emissions further. A summary of the technologies reviewed is provided below.

Solar Photovoltaics (PV) - Solar photovoltaic (PV) systems generate zero carbon electricity from sunlight and are well suited to dwellings with unobstructed south-east to south-west facing roof space. Excess power is exported to the grid or can be harnessed using battery storage. Maintenance requirements are typically minimal. The detailed design of the development will aim to ensure homes are orientated and designed where possible to maximise energy generation from Solar PV.

Solar Thermal - Solar thermal systems generate zero carbon hot water from sunlight in a similar manner to Solar PV. They require insulated tanks to store the hot water and have greater maintenance demands than Solar PV given the need to ensure anti-freeze in the pipework is topped up every few years. They can be a highly cost-effective technology particularly where mains gas supplies are not available, however in energy efficient new homes and buildings their benefit can be limited.

Heat Pumps - Heat pumps provide low carbon heat sourced either from the ground (Ground Source Heat Pumps) or air (Air Source Heat Pumps). This type of system is suited to thermally efficient

buildings. They require main electricity to operate but typically generate at around three units of heat for every unit of electricity that is consumed. Because the heat generated is at a lower temperature than that produced by a gas boiler, heat pumps typically require underfloor heating or over-sized radiators to ensure the heat is distributed efficiently. Heat pumps do however require ongoing and fairly frequent maintenance. The government anticipates that the decarbonisation of the electricity network will shift design to using electric heating systems, including heat pumps which are a key part of the delivery of the 2025 FHS.

Biomass - Biomass provides useable heat from a range of solid fuels including wood and straw. The installation of a biomass boiler, flue and associated fuel store require significant space and is not considered appropriate for the development.

At this stage potentially suitable technologies for consideration during the detailed design of individual homes in conjunction with future changes to the Building Regulations include Solar PV and Heat Pumps. These are noted within the FHS consultation as the most likely technologies to be used to meet the Building Regulations carbon targets.

Operational Energy and Carbon Summary

The development will be designed to deliver low carbon homes which meet the requirements of the 2025 FHS, achieving a minimum of 63% carbon reduction beyond Part L 2021.

Table 2 shows the estimated carbon performance of the proposed development.

This is based on available SAP information for a limited number of the proposed building types, individual building type specification and performance will vary.

The carbon performance of the proposals is based on the expected requirements of the FHS and assumes an all-electric energy strategy with the use of ASHP's. It is not yet confirmed that Solar PV are required for compliance with the FHS but the roofs

will be designed to accommodate Solar PV as appropriate.

Table 2: Estimated Operation Carbon Emissions

	Carbon emissions (tonnes CO ₂ /yr)
Part L 2021	124
Proposed Development	46
Emissions reduction	78
% reduction	63%

**Based on indicative carbon calculations at Outline stage. More detailed energy modelling will be completed in the case that the application progresses to reserved matters stage.*

This demonstrates how the proposed development can reduce carbon emissions, in line with the current Local Plan **Core Policy 41** and **57**, supporting the emerging Local Plan **Policy 4** and **85**, through enhanced fabric provision, energy efficiency measures and use of low carbon renewable energy technologies.

3.5.2 Climate Change Adaptation

To ensure the proposed development is resilient to the effects of climate change it will incorporate a number of key design measures in response to the climate predictions set out in the UKCP18 projections.

The Independent Assessment of UK Climate Risk (June 2021) identifies key risks associated with the effects of climate change. In relation to the built environment and the proposed development, these include reduced summer water availability, increased winter rainfall, and increased summer temperatures.

This section identifies key measures which will be incorporated into the design of new buildings and the proposed development to adapt to climate change.

Water Efficiency

Potable water is an increasingly important natural resource. The Site is served Wessex Water, although it is not classed as being in an area with serious water stress⁹, the new development will aim to further reduce water consumption through a range of water efficiency measures such as:

- Dual flush WCs;
- Water meters;
- Low flow fittings; and
- Where appropriate, water efficient equipment.

Through the use of these measures new homes will target a water consumption rate of 110 l/p/d in line with the Building Regulations higher water efficiency standard, supporting the emerging plan **Policy 4**.

Flood Risk and Drainage

A Flood Risk Assessment (FRA) & Drainage Strategy has been prepared by Phoenix Design Partnership Ltd, which indicates that majority of the Site is located within Flood Zone 1. The low parts of the Site adjacent to the watercourse are within Flood Zones 2 and 3 with a high risk of flooding. However, the proposed built development, access and level raising will only be in Flood Zone 1.

The Site was deemed to be at low risk of flooding from fluvial, surface water, groundwater, sewers, and other artificial sources.

Surface water from the proposed development will discharge into the watercourse running through the Site with the discharge limited to Q_{bar} for events up to and including the 1:100 + 45% climate change/urban creep allowance event with 30% betterment provided for greenfield rates.

Attenuation will be provided primarily in a pond. Additional SuDS features could potentially include swales and rain gardens, which will be confirmed during reserved matters stage.

It is considered that with the above measures any residual flood risk associated with climate change

⁹ [Water Stressed Areas 2021](#)

can be effectively mitigated. Further details can be found in the FRA accompanying the application.

Overheating

With increasing summer temperatures there is an increasing risk of overheating in buildings which could adversely affect building occupants and users.

The development will be designed in accordance with the cooling hierarchy, as shown in **Figure 5**, which aims to reduce any potential overheating in buildings through minimising heat generation first, followed by the consideration of passive cooling measures, and finally the use of active cooling using the lowest carbon option.

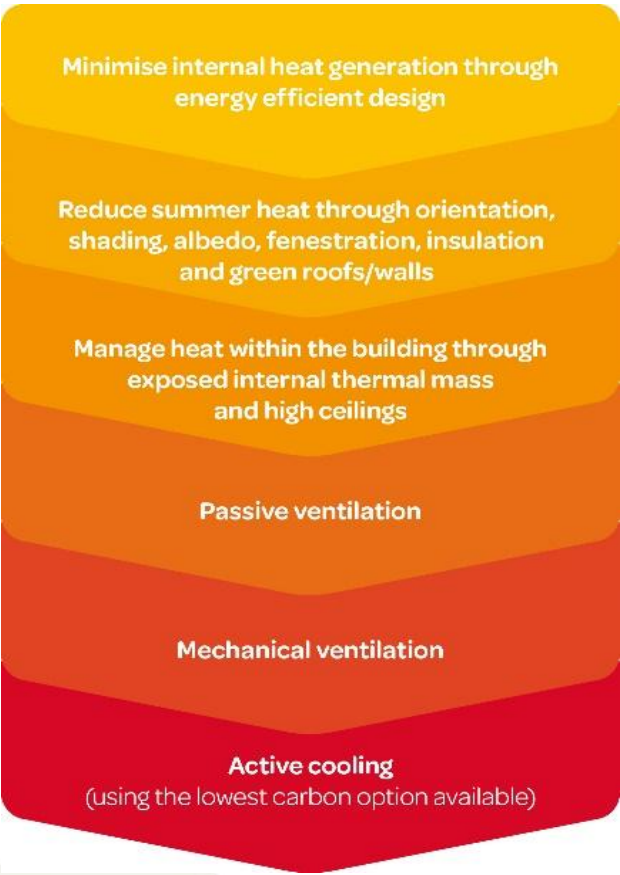


Figure 5: The Cooling Hierarchy

Incorporating the cooling hierarchy into the design process means buildings will be better equipped to manage their cooling needs and to adapt to and mitigate climate change, while also minimising the carbon emissions associated with reducing overheating risk.

An Overheating Assessment in line with the requirements of Part O of the Building Regulations will be undertaken as part of the detailed design of individual homes.

3.6 Conserving and Enhancing the Natural Environment

The Proposed Development will incorporate measures to support and enhance the environment through consideration of the existing site ecology, including measures to mitigate the impact of the Site and enhance site biodiversity, as well as incorporate measures to reduce pollution from the Site.

3.6.1 Ecology

An Ecological Impact Assessment (EcIA) was prepared by Ethos Environmental Planning in 2022, to establish the ecological baseline of the Site and to assess the potential ecological implications of the Proposed Development at Land West of Westbury Road, Warminster. An Ecological Addendum was subsequently prepared in October 2025 to update the EcIA.

The 2022 EcIA identified that Site was predominantly arable land, with three fields of permanent cropland within the centre and south-eastern areas. An extensive network of hedgerows and associated ditches provided connectivity between the Site to the wider environment. There was a parcel of wet woodland, including a pond on the western boundary, associated with a stream and an area of tussocky grassland. The 2025 Addendum confirms that the baseline habitat composition, structure, and extent remain largely unchanged, with the exception of the two northernmost fields, which have been downgraded to modified grassland due to changes in vegetation composition.

The Site was found to provide potential habitat for a range of species, including badgers, bats, birds, hedgehogs, brown hares, polecats, riparian mammals, reptiles, amphibians and invertebrates. This includes particularly Horseshoe bats, which are

assessed to be of County level ecological significance.

Mitigation Measures

To minimise the effects on protected species, retained habitats and adjacent protected sites a range of mitigation measures have been proposed and recommended as part of the EcIA, including:

- Retention, buffering and enhancement of existing hedgerows where possible;
- Implementation of standard pollution prevention controls to avoid any impacts on the stream;
- Adoption of a sensitive lighting strategy during both construction and operation; and
- Application of precautionary construction measures, to be secured through a CEMP.

Enhancement Measures

To enhance the site habitats and species a range of enhancement measures have also been proposed and recommended, including:

- Restoration and enhancement of the stream through additional buffering and riparian planting;
- Additional planting within the landscape plan to enhance existing green corridors and to create new corridors; and
- Installation of biodiversity features, including bird bricks, bat boxes, hedgehog gaps, reptiles and amphibians hibernacula, and invertebrate log piles/bug hotels.

The supporting BNG report will demonstrate the development will be capable of achieving a minimum 10% net gain in biodiversity. More information is available in the EcIA and Ecological Addendum accompanying the application.

3.6.2 Pollution

The Proposed Development will aim to minimise any negative impacts on the natural environment considering the impacts of water use, materials, and air quality.

A Construction Environmental Management Plan (CEMP) will be secured via pre-commencement planning condition which will require pollution prevention and dust control measures to be implemented during site clearance and construction works. The risk of pollution will be reduced and managed through measures such as:

- Reducing erosion and run-off by minimising land disturbance and leaving vegetation cover where possible;
- Covering skips and trucks loaded with construction materials;
- Use of non-toxic paints, solvents and other hazardous materials wherever possible; and
- Segregation, covering and monitoring of any toxic substances to prevent spills and possible site contamination.

3.7 Sustainable Resources

A key benefit of using sustainable and natural materials, and incorporating material efficiency into new development, is reducing carbon emissions. Increasingly stringent energy efficiency and operational carbon regulations means that embodied carbon is proportionately an increased contribution to climate change. Finding ways to reduce embodied carbon associated with new development is therefore becoming increasingly important.

Where possible, materials will be procured locally, to reduce carbon emissions associated with the transport of materials.

The development specification will also prioritise responsible supply chains such as those who hold FSC and BES6001 certification.

Insulation materials containing substances known to contribute to stratospheric ozone depletion or with the potential to contribute to global warming will not be used. Natural insulation materials such as mineral wool, rock wool or cork board will be considered as they are amongst the lowest Global Warming Potential (GWP) rating.

3.8 Waste Management

The Proposed Development will help protect natural resources through the management of waste through construction and operation, in line with the emerging Local Plan **Policy 4**.

Waste will be managed in accordance with waste hierarchy, which prioritises waste prevention, followed by re-use, recycling, then energy recovery and disposal as a last resort (as set out in **Figure 6**).



Figure 6: The Waste Hierarchy

Construction Waste Management -

Prior to the construction phase a Construction Environmental Management Plan (CEMP) will be developed to ensure the use of measures to minimise waste during the construction phases of the development, including the use of a scheme for recycling/disposing of waste arising from construction works.

The reduction, reuse and recycling of construction waste is to be prioritised through measures such as avoidance of over-ordering, supervision of deliveries, use of secure materials storage facilities and reuse of materials onsite where feasible.

In addition, the development will be registered with the Considerate Constructors Scheme and achieve certification against the Code of Considerate Practice.

Operational Waste Management -

In accordance with the principles of the waste hierarchy the development will make provision for the storage of non-recyclable waste and recyclable waste including dedicated storage for waste in new

homes to encourage residents to recycle waste materials.

Full consideration will be given to the Council's waste management infrastructure and services to ensure that the occupiers have the necessary infrastructure to participate in any kerbside recycling services.

4. Conclusion

This Sustainability and Energy Statement has been prepared to demonstrate how the Proposed Development responds positively to national and local sustainable policy requirements.

The Proposed Development at Land West of Westbury Road, Warminster has been designed to respond positively to national and local plan policy incorporating measures to deliver social and economic benefits, while also protecting and enhancing the environment where possible. This includes the consideration of measures to mitigate and adapt to the effects of climate change.

This Sustainability and Energy Statement which accompanies the application sets out key sustainable design measures incorporated at this stage and to be considered during the detailed design of homes.

Social and Economic Benefits – The development aims to provide a range of social and economic benefits to both new and existing residents, through:

- Provision of up to 205 new homes providing opportunities for local people;
- Provision of 30% affordable housing units, in line with Local Plan **Core Policy 43**;
- Provision of extensive green open space, including play area and allotments, in line with Local Plan **Core Policy 57**;

- Homes designed to create healthy living environments which are flexible for the future.

Environmental Protection and Enhancement – Through a range of design measures the development aims to protect and enhance the local environment, including:

- Buildings which will be designed to make use of sustainable materials to reduce environmental impacts of construction, targeting emerging Local Plan **Policy 4**;
- Development designed to prioritise sustainable and active modes of travel including walking and cycling, in line with Local Plan **Core Policy 60, 61 and 64**;
- Provision of measures to protect on-site ecology and enhancement measures to increase site biodiversity which also helps reduce the impact of climate change on site habitats, in line with Local Plan **Core Policy 50**; and
- Provision of measures through construction and operation of the site to reduce pollution, minimise waste and encourage recycling, targeting emerging Local Plan **Policy 4**.

Mitigating and Adapting to Climate Change – The development will incorporate a range of measures to reduce carbon emissions, mitigating the effects of climate change, and adaptation measures to ensure the long term resilience of the development to the effects of climate change. Measures include:

- Buildings designed to reduce carbon emissions in accordance with anticipated changes to the Building Regulations through the use of energy hierarchy, using a fabric first approach to design to reduce energy demand, helping mitigate the effects of climate change, in line with Local Plan

Core Policy 41 and 57, targeting emerging Local Plan **Policy 4**;

- Specification of water efficient fittings to reduce water consumption to 110 litres per person per day in line with the government's higher water efficiency standard, targeting emerging Local Plan **Policy 4**;
- Development of new homes in a low flood risk area and provision of a surface water drainage system designed to manage a 1 in 100 annual probability plus 45% climate change rainfall event, in line with Local Plan **Core Policy 67**.
- Homes designed to take into account increasing annual temperatures set out in the UKCP18 climate projections to minimise the risk of overheating.

BDW Trading Ltd are committed to the delivery of sustainable homes which include measures which provide economic and social benefits, protect and enhance the environment, as well as mitigating and adapting to the long-term effects of climate change.

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Sustainability