



Land at Malmesbury Road, Cricklade

Sustainable Energy Strategy

March 2026

Key Features of the Proposals

Highly energy efficient buildings, adopting a 'fabric first' approach

Air source heat pumps for heating and hot water

Renewable energy generation via photovoltaic panels

Zero carbon ready

100%
of properties with associated parking to have dedicated EV charging

Future Homes Standard Compliant

The sustainable approach described within this document demonstrates that the proposals will meet the relevant requirements of the Wiltshire planning framework, creating an energy efficient, low carbon development.

Contents

1	Introduction	4
1.1	This Strategy	4
1.2	The Site	5
1.3	Description of Development	5
2	Sustainability Policy Review	7
2.1	National Planning Policy	7
2.2	Local Planning Policy	10
3	Sustainable Energy Strategy	13
3.1	The Energy Hierarchy	13
3.2	Orientation, Passive Solar Design and Overheating Risk	13
3.3	Highly Efficient Building Envelope	15
3.4	Lighting, Fixtures and Fittings	16
3.5	Low Carbon Energy Supply	17
3.6	Indicative Specification	20
4	Electric Vehicle Charging Points	21
5	Summary	22

1 Introduction

1.1 This Strategy

- 1.1.1 This *Sustainable Energy Strategy* supports the outline planning application for the proposed development of up to 315 dwellings on Land at Malmesbury Road, Cricklade in Wiltshire. It has been commissioned by Mac Mic Strategic Land Limited (the Applicant).
- 1.1.2 The Strategy describes the design principles which will be applied at the proposed development to ensure that the dwellings are compliant with the Future Homes Standard, details of which are due to be announced later in 2026:
- The development will be 'zero carbon ready', and will be futureproofed to become operationally zero carbon over time as the Grid decarbonises;
 - Space heating demand will be reduced by:
 - Balancing solar gain against overheating risk;
 - Applying 'fabric first' principles and adopting a highly efficient thermal specification.
 - Operational energy use will be reduced by:
 - Installing high efficiency lighting and appliances;
 - Installing low carbon air source heat pumps.
 - Energy will be generated on site via roof integrated solar photovoltaic panels.
- 1.1.3 The comprehensive approach to carbon reduction described will also ensure that the dwelling designs exceed the requirements of Core Policy 41 of the *Wiltshire Core Strategy (Adopted January 2015)* and current Building Regulations whilst satisfying the core themes of the emerging *Wiltshire Local Plan 2020-2038*.
- 1.1.4 The energy strategy is described in as much detail as is possible at this outline planning stage. However, since the detailed requirements of the Future Homes Standard and the emerging Wiltshire Local Plan are still to be confirmed, there are areas within this document where a definitive solution cannot currently be provided.
- 1.1.5 The approach described will therefore continue to be refined and adapted to ensure the development complies with the local planning framework in place at the point of determination.
- 1.1.6 Further detail, accompanied by compliance calculations to demonstrate performance, can therefore be provided at Reserved Matters and be secured by Condition if necessary.

1.2 The Site

- 1.2.1 The proposed c.20.72ha site consists of two parcels of land which are located to the north and south of Stones Lane which is to the west of the town of Cricklade.
- 1.2.2 The c.17.22ha Southern Parcel currently comprises pastoral land which is bordered and divided by a series of hedgerows and tree belts. It is proposed that this area will accommodate the built development in terms of housing, infrastructure, SUDS drainage ponds and open space. The parcel is bound by Malmesbury Road to the south, Stones Lane to the northeast, the proposed Bloor Homes development to the east and agricultural land to the north and west.
- 1.2.3 The c.3.50ha Northern Parcel also comprises pastoral land with boundary trees and hedgerows. It is proposed that this will be used to provide the required Suitable Alternative Natural Green Space (SANG) for the development. The parcel is bound by the National Cycle Network Route 45 and agricultural land to the northeast, agricultural land to the south and north west and Stones Lane to the west.

1.3 Description of Development

- 1.3.1 The outline planning application has the following description of development:

Outline planning permission for up to 315 dwellings with associated access and infrastructure including Suitable Alternative Natural Greenspace. All matters are reserved except for access.

- 1.3.2 The image below shows the Framework Plan for the proposed development:



Figure 1: Framework Plan (Roberts Limbrick)

2 Sustainability Policy Review

2.1 National Planning Policy

The National Planning Policy Framework December 2024 (NPPF)

- 2.1.1 The NPPF Section 2 states that the purpose of the planning system is to contribute to sustainable development, and it therefore has three overarching objectives 'to be pursued in mutually supportive ways':
- An economic objective, contributing to a strong, responsive, competitive economy;
 - A social objective, supporting vibrant and healthy communities and;
 - An environmental objective, protecting and enhancing our natural, built and historic environment.
- 2.1.2 As such, the NPPF at its heart contains a 'presumption in favour of sustainable development'. Emphasising the need to achieve well designed places, the NPPF states that "*Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities*".
- 2.1.3 The NPPF sets out a number of principles which should underpin both plan-making and decision-taking, and of which many are particularly relevant to this document. In this context, planning should:
- Promote healthy and inclusive places that encourage social interaction, enhance healthy lifestyles, and which are safe and accessible;
 - Seek to secure a high-quality of design and a good standard of amenity for occupants;
 - Support the transition to a low-carbon future, avoid increased vulnerability to climate change impacts, take account of flood risk and coastal change and seek to reduce greenhouse gas emissions. Plans should include a positive strategy to help increase the use and supply of renewable and low carbon energy;
 - Help conserve and enhance the natural environment, achieve net gains in biodiversity and reduce the impact of all forms of pollution;
 - Plan and manage development to make full use of public transport, walking and cycling, and take into account the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles;
 - Support the expansion of electronic communications networks, including next generation mobile technology (such as 5G) and full fibre broadband connections, which are seen as essential for economic growth and social wellbeing.

The Climate Change Act

- 2.1.4 The Climate Change Act 2008 is the basis for the UK's approach for tackling and responding to climate change. It commits the UK government to reducing greenhouse gas emissions by at least 100% of 1990 levels by 2050.

Building Regulations

- 2.1.5 *Approved Document L, Conservation of Fuel and Power, Volume 1: Dwellings (2021)* came into force in June 2022. It sets out the Building Regulation standards for energy performance in new developments, placing a greater emphasis on reducing primary energy use, in addition to achieving carbon and fabric efficiency targets, compared to the previous standards. The tightening of fabric energy efficiency standards, air tightness and carbon performance targets are accompanied by updated calculation and modelling requirements within the compliance mechanism (SAP10.2 for dwellings).
- 2.1.6 *Approved Document F, Ventilation, Volume 1: Dwellings* details requirements for ventilation in domestic properties to ensure that increased air tightness (as required by the updates to Approved Document L) does not impact on internal air quality.
- 2.1.7 *Approved Document O: Overheating* has been put into place to limit overheating risk in new residential buildings. It expands on the provision in the previous Part L and requires the use of passive methods where feasible. Compliance can be demonstrated through a prescriptive or thermal simulation compliance path.
- 2.1.8 *Approved Document S: Infrastructure for Charging Electric Vehicles (December 2021)* details regulations for the installation of electric vehicle charging points and cable routes. Requirement S1 from Part S of Schedule 1 and regulation 44D of the Building Regulations states that every new home with an associated parking space must have access to an EV charging point.

The Future Homes Standard

- 2.1.9 The Future Homes Standard (FHS) is part of the Government's strategy for achieving the Climate Change Act 2050 target. It will build on the current uplifts within Approved Document L and Approved Document F.
- 2.1.10 Under the proposed new Standard, an average home will have 75 – 80% fewer carbon emissions than one built to the Building Regulation 2013 requirements.
- 2.1.11 The details of the Standard are still to be confirmed, with various options having been consulted upon as part of the Future Homes and Buildings Standards Consultation which was launched in December 2023.

2.1.12 However, what is clear is that the Standard will require new homes to be built with high fabric standards and low carbon heating (instead of fossil fuel powered boilers which will be banned) so that they are 'zero-carbon ready'. This means that no future retrofitting will be needed to enable the properties to benefit from the ongoing decarbonisation of the Grid.

2.1.13 Two options for the notional building specification have been presented as part of the FHS Consultation, both of which are designed with the aim of reducing running costs and maintaining thermal comfort while balancing build costs. In both cases, the Consultation has proposed that the building fabric standards remain broadly as per those in Approved Document L (2021).

Building Element		Option 1	Option 2
U-Values (W/m ² K)	Roof	0.11	0.11
	External Wall	0.18	0.18
	Floor	0.13	0.13
	Window	1.2	1.2
	Door	1.0	1.0
Wastewater Heat Recovery		Yes	No
Heat Source		A notional air source heat pump equivalent to ErP A++	A notional air source heat pump equivalent to ErP A++
Hot Water System		Hot water storage vessel, 120mm insulation	Hot water storage vessel, 120mm insulation
Airtightness (m ³ /m ² .h@50Pa)		4	5
Ventilation		dMEV	Natural ventilation with intermittent extract fans
Renewable Energy		High efficiency solar PV panels covering equivalent of 40% of ground floor area	None

Table 1: Proposed Main Notional Building Specifications for Homes (Future Homes Standard Consultation, Dec 2023)

2.1.14 Other areas under consideration include improving the guidance and minimum standards for heat losses from building services, improving the real-world performance of homes and supporting the expansion of cleaner heat networks.

2.1.15 Two options are being considered for transitional arrangements – either a 6-month or 12-month period between the Future Homes Standard legislation being laid and it coming into force, followed by a 12-month transitional period.

2.1.16 The Government has also consulted on a new calculation methodology which will be used to demonstrate compliance with the FHS. Known as the Home Energy Model (HEM), this will replace the existing SAP compliance tool, and will also be used to produce Energy Performance Certificates (EPCs).

2.2 Local Planning Policy

Wiltshire Core Strategy (Adopted January 2015)

- 2.2.1 The Wiltshire Core Strategy (Adopted January 2015) sets out the Council's spatial vision, key objectives and overall principles for development in the county. It forms the main basis for assessment in planning terms and this Strategy has therefore been designed to address its requirements.
- 2.2.2 Addressing climate change is one of the strategic objectives identified within the Core Strategy, highlighting it as a key consideration for Wiltshire Council.
- 2.2.3 Policy extracts from the Core Strategy which are of most relevance to this document are provided within the following table:

Core Policy	Extract
41	Sustainable Construction and Low Carbon Energy Climate change adaptation New development, building conversions, refurbishments and extensions will be encouraged to incorporate design measures to reduce energy demand. Development will be well insulated and designed to take advantage of natural light and heat from the sun and use natural air movement for ventilation, whilst maximising cooling in the summer. Sustainable construction New homes (excluding extensions and conversions) will be required to achieve at least Level 4 (in full) of the Code for Sustainable Homes*. (...) Renewable and low-carbon energy All proposals for major development will be required to submit a Sustainable Energy Strategy alongside the planning application outlining the low-carbon strategy for the proposal.
57	Ensuring High Quality Design and Place Shaping A high standard of design is required in all new developments (...) Applications for new development must be accompanied by appropriate information to demonstrate how the proposal will make a positive contribution to the character of Wiltshire through: (...) ii. the retention and enhancement of existing important landscaping and natural features, (e.g. trees, hedges, banks and watercourses), in order to take opportunities to enhance biodiversity, create wildlife and recreational corridors, effectively integrate the development into its setting and to justify and mitigate against any losses that may occur through the development; (...) v. the maximisation of 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, in accordance with Core Policy 41 (Sustainable Construction and Low Carbon Energy); (...) xiv. meeting the requirements of Core Policy 61 (Transport and New Development).

* Code for Sustainable Homes was withdrawn in 2015 and has been largely superseded by Building Regulations standards.

Draft Wiltshire Local Plan 2020-2038 (September 2023)

- 2.2.4 Wiltshire Council are currently preparing a new Local Plan to replace the Core Strategy described above. It will cover the period 2020-2038 and will contain a suite of new policies to guide development in the area.
- 2.2.5 The Regulation 19 Pre-Submission Draft Local Plan was submitted to the Planning Inspectorate for Examination on 28 November 2024 but the Examination is currently on hold. The draft Local Plan carries limited weight at this stage.
- 2.2.6 The Draft Local Plan document includes a substantially updated version of Core Policy 41 (*Draft Policy 85: Sustainable Construction and Low Carbon Energy*) which states new build residential development should achieve a zero carbon in operation standard.

Draft Policy	Extract
85	Sustainable Construction and Low Carbon Energy <i>New residential developments</i> New build residential development will achieve a zero-carbon in operation standard, by significantly reducing heat and power demand of the building 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. If it can be demonstrated that this would be economically unviable or technically unfeasible (for example to achieve enough onsite renewables for a block of flats), after on-site renewables have been maximised, any remaining carbon can be offset through developer contributions. (...)

- 2.2.7 While these are draft policies which may not be adopted in their current form, it is the Applicant's view that the proposed development should aim to achieve high levels of sustainability.
- 2.2.8 This Strategy therefore looks ahead to the emerging Future Homes Standard and sets out how the development will be zero carbon ready, ensuring that the development will align with the broad aims of the emerging policy.

Wiltshire Design Guide (Adopted March 2024)

- 2.2.9 The Wiltshire Design Guide Supplementary Planning Document (SPD) expands upon Core Strategy Policy 57, providing guidance to developers to ensure a high standard of design for all development in Wiltshire.
- 2.2.10 It includes a chapter on Resources which sets out the council's aim for Net Zero and provides advice and best practice to achieve this for both new build and retrofit projects.

2.2.11 The SPD has been reviewed and has informed the energy strategy for the proposed development.

Cricklade Neighbourhood Plan 2026 (Made March 2018)

2.2.12 The current Cricklade Neighbourhood Plan establishes a vision for the development of the area, setting out clear objectives to influence the town's growth. The Plan has been reviewed, and it does not include any policies of specific relevance to this Strategy.

2.2.13 Cricklade Town Council is in the process of reviewing the Cricklade Neighbourhood Plan with a view to extending it to 2038.

3 Sustainable Energy Strategy

3.1 The Energy Hierarchy

- 3.1.1 The Energy Hierarchy underpins the entire approach to building performance for this development, thus prioritising a reduction in the demand for energy as far as possible through thermally efficient, easily controlled, well designed and oriented buildings.
- 3.1.2 This 'fabric first' approach is in line with the requirements of Core Policy 41 of the Wiltshire Core Strategy.

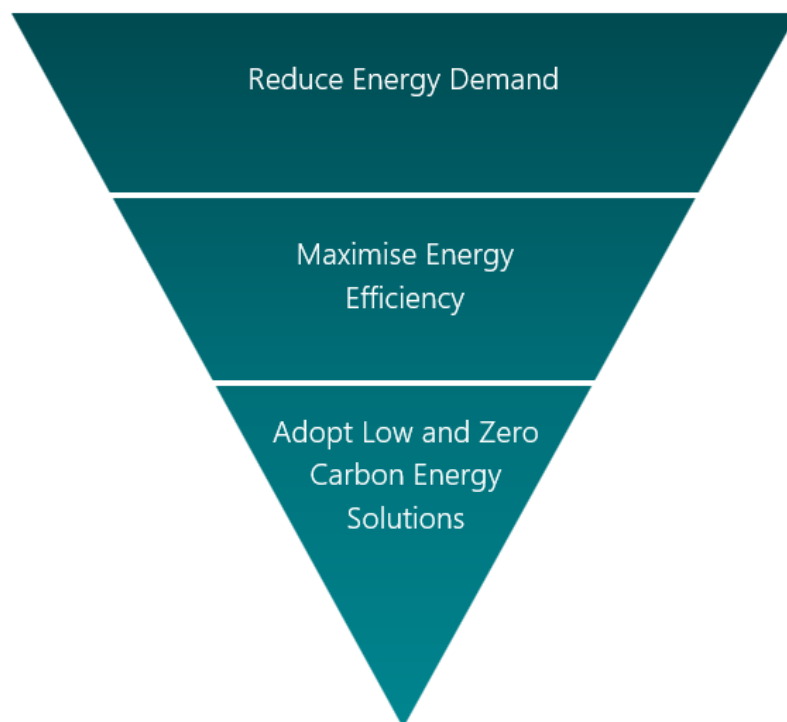


Figure 2: The Energy Hierarchy

3.2 Orientation and Passive Solar Design and Overheating Risk

- 3.2.1 The orientation of buildings, along with the size and location of glazing and the extent of overshadowing, plays an important role in energy performance. Improving a building's orientation so that the main living spaces benefit from the heat and light of the Sun can reduce the requirement to use fuels to perform the same function thus reducing costs, energy use and associated carbon emissions.
- 3.2.2 The proposed layout of the site will be developed with respect to identified spatial, topological and visual constraints, all of which need to be carefully considered. Within these parameters, a proportion of the properties will have a southerly orientation and will therefore benefit from the Sun during the middle portion of the day without suffering from potential overheating later in the afternoon.

- 3.2.3 Furthermore, the relatively low density of the development will ensure appropriate spaces around dwellings, reducing overshadowing.
- 3.2.1 However, there is a balance to be struck between maximising solar gain and the risk of overheating, something which is of increasing concern given our knowledge of future climate.
- 3.2.2 Approved Document O details requirements for mitigating this risk in new residential dwellings and methods for demonstrating compliance, including the use of either a compliance checklist or the *CIBSE Guide TM59 Design Methodology for the Assessment of Overheating Risk in Homes* (CIBSE, June 2017).
- 3.2.3 The dwelling designs will undergo overheating risk modelling at the appropriate design stage.
- 3.2.4 Acceptable strategies for reducing any overheating risk as described in Approved Document O focus on passive design features and include:
- Limiting solar gains:
 - Fixed shading devices such as shutters, external blinds, overhangs or awnings;
 - Glazing design including size, orientation, glass g-value and depth of window reveal;
 - Shading provided by adjacent permanent structures.
 - Removing excess heat:
 - Opening windows and ideally cross ventilation;
 - Ventilation louvres in external walls;
 - A mechanical ventilation system;
 - A mechanical cooling system as a last resort.
- 3.2.5 The impact of orientation on the viability of photovoltaic panels is discussed in Paragraph 3.4.14-3.5.15.

3.3 Highly Efficient Building Envelope

Thermal Elements

- 3.3.1 A 'fabric first' building specification will be developed to ensure that the envelope of each dwelling, including the wall, roof, floor, glazing and doors, will be highly energy efficient. This will reduce energy demand and increase comfort.
- 3.3.2 Thermal bridges will be minimised through the application of design details and products that provide continuous insulation, such as insulated lintels.
- 3.3.3 Table 2 in Section 3.6 provides an illustration of the levels of performance which are likely to be required, including u-values for different thermal elements.
- 3.3.4 The final specification will be confirmed at a later stage in the planning process once housetypes have been fixed and the details of the Future Homes Standard have been announced. It will be designed to ensure that the dwellings meet the Future Homes Standard, with the option of further refining the specification should this be required by local policy.

Air Tightness

- 3.3.5 It is vital that dwellings have sufficient levels of air tightness to reduce heat loss and minimise draughts. Air tightness is also an important factor in managing interstitial condensation and reducing sound transmission through structures.
- 3.3.6 The current target for the development will be to ensure the dwellings are constructed with an air permeability level of $c.5\text{m}^3/\text{m}^2@50\text{Pa}$ or less.

Controlled Ventilation

- 3.3.7 The drive for air tightness will need to be matched by correctly designed ventilation. This is vital for healthy, comfortable buildings as it dilutes and removes pollutants that can accumulate in a closed space. Excessive moisture in particular can otherwise be a significant problem.
- 3.3.8 The dwellings at the proposed development will benefit from natural ventilation via openable windows. This will enable rapid purges of air to maintain good levels of internal air quality when required.

- 3.3.9 It may also be necessary for the properties to include a form of mechanical extract ventilation to ensure adequate and controlled ventilation when the as-designed air permeability is less than $5\text{m}^3/\text{m}^2@50\text{Pa}$, in line with the requirements of Approved Document F.
- 3.3.10 A whole-house Mechanical Ventilation Heat Recovery (MVHR) system would be a suitable option for each of the houses, recommended on the basis of the system's energy saving impact and its technical efficacy when dealing with the low levels of air permeability described above.
- 3.3.11 It is possible that any flats will be fitted with an exhaust air heat pump which combines heating, hot water and whole property ventilation (see Section 3.5 for further details).
- 3.3.12 The final choice of system will be dependent on detailed recommendations from the Applicant's M&E consultant. All ventilation will be in line with the requirements of Approved Document F.

3.4 Lighting, Fixtures and Fittings

- 3.4.1 Further energy savings will be made by maximising the efficiency of appliances, lighting, fixtures and fittings.
- 3.4.2 All internal and external fixed electric lighting will be categorised as 'energy efficient' in line with regulations to minimise lifetime energy use and associated emissions.
- 3.4.3 All appliances where installed will be high efficiency, further minimising the use of both electricity and hot water. Moreover, where these are not installed, they will be provided to incoming residents within the list of optional extras. There will be space in all gardens for clothes drying to discourage the use of tumble dryers.
- 3.4.4 Taps and shower fixtures and fittings that reduce hot water consumption with low and/or aerated flows will be specified.
- 3.4.5 A further option that could be explored is the installation of Waste Water Heat Recovery units (WWHR) in those dwellings that can accommodate them. WWHR units enable heat to be recovered from the waste water produced in bathrooms via baths or showers. This heat is then used to pre-warm water in the system, and thus reduce the amount of energy needed to provide hot water for use within the property. The impact is a further reduction in energy use.

3.5 Low Carbon Energy Supply

- 3.5.1 The UK is rapidly moving towards the electrification of the heating system. Indeed, it is expected that the Future Homes Standard will not permit the installation of gas or oil boilers.
- 3.5.2 The Applicant has therefore confirmed that this development will not be connected to the gas network and will instead look to alternative options for energy supply and heating provision.

High Efficiency Heat Pumps

- 3.5.3 High efficiency, low carbon heat pumps will be installed in each of the the dwellings at this development.
- 3.5.4 The thermal efficiency of the building envelope as described above will mean the heat pumps will be able to operate at a low flow temperature and therefore high levels of efficiency. This will improve the user experience and reduce running costs for residents.
- 3.5.5 Furthermore, the heat pump solution will ensure the homes are 'zero-carbon ready', setting the development on a trajectory to net zero emissions over time: the rapid expansion in renewable and low carbon energy supply within the Grid in recent years means that Grid electricity is considerably cleaner per unit than natural gas, and will continue to decarbonise over time:

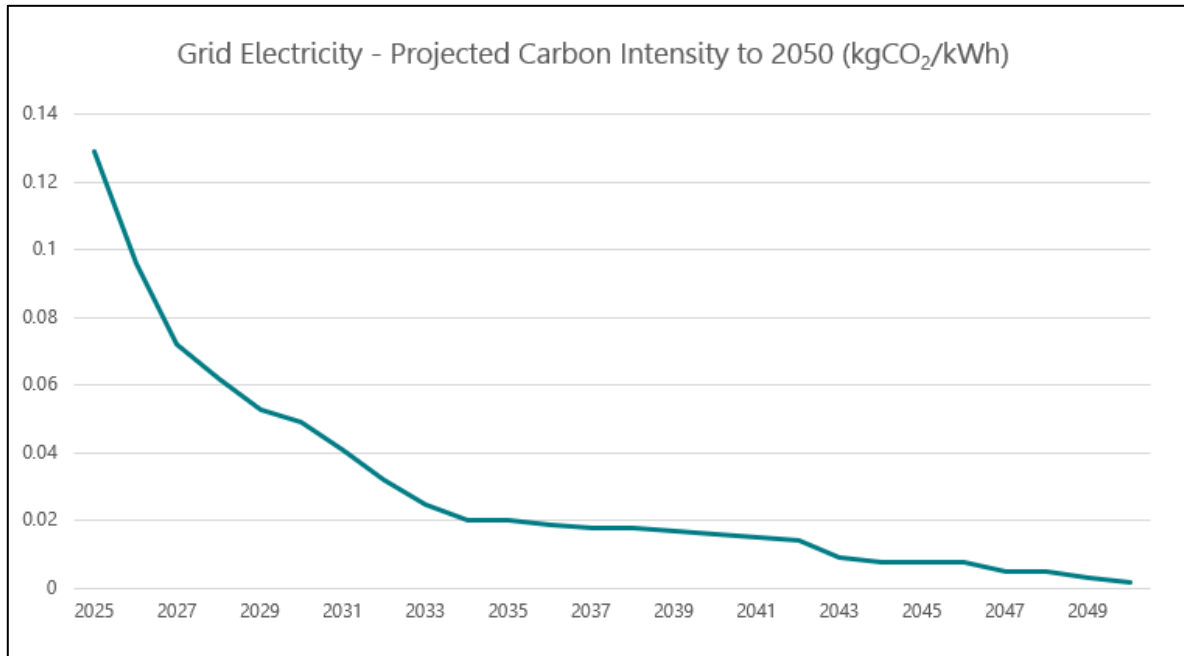


Figure 3: Projected Grid Decarbonisation
(Source: UK Government Green Book, Supplementary Guidance, November 2023)

Air Source Heat Pumps

- 3.5.6 Air source heat pump (ASHP) units will be installed to provide space and water heating in the houses at this development.
- 3.5.7 High quality, well installed ASHP units using lower flow temperatures in efficient buildings can deliver a Seasonal Coefficient of Performance (SCOP) which exceeds 320%. This significantly reduces both operational costs for occupiers and carbon emissions when compared to gas or direct electric alternatives.
- 3.5.8 A number of key design parameters will be considered when locating and installing the external components of the ASHPs:
- The front of the heat pump will have at least 1m clear of obstructions, and ideally 1.5m (noting that the rear of the unit will sit around 0.3-0.4m off a wall). However, every manufacturer has different requirements, and the final distances will be dependent on the product specified;
 - The government removed the requirement for heat pumps to be located at least a metre from a neighbour's boundary, both to encourage take up but also in recognition of the fact noise is much less of an issue than it used to be. However, it remains good practice to keep external units away from a neighbour's boundary, particularly if at that point it would be adjacent to the neighbouring building rather than a garden space;
 - Wherever possible, ASHPs will be located on property elevations away from openable windows and bedrooms. Typically, this will mean at the side and rear elevations of a property;
 - There remains flexibility in this regard: ASHPs can typically be installed within 10m of the property, so siting them adjacent to garages and outbuildings is likely to be perfectly acceptable in most cases on this development;
 - ASHPs will not be installed on the front elevations of the properties on this development.
- 3.5.9 Internally, the following will need to be considered:
- Standard ASHPs require hot water cylinders, as they do not provide hot water on demand in the way that gas combis do. An airing cupboard will therefore be included in house type layouts. This will typically be a full height space with a minimum floor print of 800mm x 800mm.

Exhaust Air Heat Pumps

- 3.5.10 Space constraints mean that it is likely that any flats on the development will be fitted with an exhaust air heat pump (examples include the NIBE Fighter 470).
- 3.5.11 Exhaust air heat pumps combine the efficient operation of a heat pump, providing space heating and hot water, with a dwelling's ventilation system. They are particularly suitable for thermally efficient new build flats and small homes, and they do not require space for an external heat pump unit.
- 3.5.12 Exhaust air heat pump systems have carbon reduction benefits due to the use of heat pump technology, although overall SCOPs are typically lower compared to ASHPs. Furthermore, as an individual dwelling system, exhaust air heat pumps do not suffer from the distribution losses which occur in traditional heating networks typically found within apartment buildings.

Solar Photovoltaics

- 3.5.13 Solar photovoltaic (PV) panels will be installed to complement the heat pump solution where required by regulations. This option will result in further carbon reductions and energy cost savings by generating electricity on-site.
- 3.5.14 The quantity of PV installed at each property will be determined later at the Reserved Matters stage once housetypes have been designed and the details of the Future Homes Standard have been finalised.
- 3.5.15 The PV panels will be roof integrated to minimise visual impact, so the orientation and design of the buildings and roofscapes will therefore need to be carefully considered. For example, roof designs will seek to avoid features on southerly orientations that significantly limit the installation of PV, such as hipped roofs, dormers and Velux windows.
- 3.5.16 It is however recognised that orientation to maximise solar PV potential is just one of many considerations, and some flexibility in approach will be needed to achieve an acceptable final site layout.
- 3.5.17 Furthermore, east-west facing split systems are increasingly being adopted, providing a more even amount of generation through the day, and without any significant loss in annual output. It should not therefore be assumed that all roofs need to face between southeast and southwest to accommodate PV.

Control Systems

- 3.5.18 The dwellings will feature smart control systems to help future residents maximise the efficiency of their heating and energy generation systems. These are likely to include highly granular time and temperature zone control and weather compensation.
- 3.5.19 Clear and straightforward guidance on system operation, maintenance, and expected performance will be provided to incoming residents as part of their welcome packs.

3.6 Indicative Specification

- 3.6.1 Due to the outline nature of this application and the fact that the details of the Future Homes Standard and the emerging Wiltshire Local Plan are still being finalised, it is not possible to provide an exact specification for the dwellings.
- 3.6.2 Table 2 instead provides a summary of *illustrative* levels of performance which could be applied at the proposed development:

Element Type	Illustrative Specification for the Proposed Development
Roof / Sloped Roof	0.11 W/(m ² .K)
External walls	0.18 W/(m ² .K)
Ground floor	0.13 W/(m ² .K)
Glazing	1.2 W/(m ² .K)
Doors	1.0 W/(m ² .K)
Air permeability	<5.0m ³ /m ² /hour@50Pa
Ventilation system	Natural ventilation dMEV
Heating system	Air source heat pump for houses Exhaust air heat pump for flats/apartments (depending on space constraints)
Photovoltaic system	High efficiency panels where required

Table 2: Summary of Illustrative U-Values and Specifications

- 3.6.3 The actual specification to be applied will be for determination as part of a Reserved Matters application. At that point, detailed energy calculations can be provided, demonstrating more accurately the impact of the proposed approach and how it complies with the local policies and national regulations in place. This includes the Future Homes Standard plus the Wiltshire Local Plan, should it be adopted policy at that stage.

4 Electric Vehicle Charging Points

- 4.1.1 Increasingly, energy and transport systems are becoming interlinked as the nation transitions from the use of petrol and diesel vehicles to zero emission solutions based around electric charging.
- 4.1.2 There is therefore a need to provide charging infrastructure to support this wholesale shift to cleaner vehicle technology and this is supported by regulations: Approved Document S of the Building Regulations described in Section 2 sets out the comprehensive standards and detailed specifications required at new residential development.
- 4.1.3 The Applicant will design and manage the power network to provide the level of EV charging infrastructure required. To this end, each dwelling with associated parking will have access to an EV charging point which will need to have a minimum nominal output of 7kW and be fitted with a universal socket.
- 4.1.4 Approved Document S should be referred to for full details including installation requirements, the cost cap and standards for charging points and cable routes.
- 4.1.5 The full details of the EV charging provision to be installed on the proposed development will be confirmed at the appropriate stage in the planning and design process.

5 Summary

- 5.1.1 This *Sustainable Energy Strategy* describes how the proposed development on Land at Malmesbury Road, Cricklade in Wiltshire will adopt a sustainable approach to energy supply and demand. It has been commissioned by Mac Mic Strategic Land Limited (the Applicant).
- 5.1.2 Throughout the document, national and local planning policy objectives and standards have been addressed to demonstrate the Applicant's commitment to these issues.
- 5.1.3 In particular, the Strategy provides as much detail as is possible at this stage in the planning process to demonstrate that the proposals will achieve the Future Homes Standard and will meet the relevant requirements of Wiltshire's adopted planning framework to create a highly efficient development:
- The dwellings will be highly energy efficient, adopting a fabric first approach. They will be orientated to maximise solar gain where possible;
 - Overheating risk will be managed through considered design;
 - There will be no natural gas connection to the site;
 - Heating and hot water will be supplied via highly efficient low carbon heat pumps;
 - Energy will be generated on site via photovoltaic panels on appropriate roof spaces where required by regulations;
 - Electric vehicle charging points will be installed in line with policy requirements.
- 5.1.4 As the planning and development process progresses, and as the wider regulatory environment develops, the approach proposed will be kept under review. The final design solution and associated detail will be provided at the Reserved Matters stage.

Completed on behalf of:

Mac Mic Strategic Land Limited

By:

Daedalus Environmental Limited
61 London Road
Maidstone
Kent
ME16 8TX

E: enquiries@daedalusenvironmental.co.uk
W: www.daedalusenvironmental.co.uk

© Daedalus Environmental Limited (2026)

This document has been prepared in accordance with the scope of the Daedalus Environmental's appointment with its client and is subject to the terms of that appointment. It is for the sole use of Daedalus Environmental's client and for the purposes, stated herein, for which it was prepared. As such Daedalus Environmental accepts no liability, howsoever incurred, by any third party, through the use of this document. No person other than the client may copy (in whole or in part) use or rely on the contents of this document, without prior written permission of Daedalus Environmental Limited. Even with the granting of said permission, the document may still only be used for the purpose for which it was originally intended, i.e. to support the planning application for the development named herein. The contents of this document are not to be construed as providing legal, commercial, financial, business, tax advice or opinion.