



Energy and Sustainability Report

Rustington Golf Centre

Client: Barratt Homes Southern Counties

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Revision History

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About Environmental Economics

Our team of experienced consultants specialise in construction and building energy. We have qualifications in sustainability, energy, engineering, building physics and construction as well as environmental, quality management and auditing.

Over the last decade, we have provided assessments and consultancy for some of the largest UK house builders, including Barratt Developments, David Wilson Homes, Bellway Homes, Abbey New Homes and Davidsons. We develop flexible, practical, cost-effective specifications for our clients through identifying solutions and delivering design advice. This includes the following disciplines:

- *Energy Reports*
- *Compliance assessments and advice covering*
 - *Part L (SAP)*
 - *Part F (ventilation)*
 - *Part G (water)*
- *BREEAM*
- *SBEM (existing and new build)*
- *Minimum Energy Efficiency Standards (MEES)*
- *Thermal Bridging (Psi value calculations)*

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1. Project Overview

1.1. Introduction

- 1.1.1. This energy and sustainability report was prepared by Environmental Economics Ltd on behalf of Barratt Homes Southern Counties. The report assesses the energy and sustainability strategy for the Rustington Golf Centre residential development.
- 1.1.2. As part of the sustainable development strategy, the proposed development has been designed to consider sustainability in accordance with the National Planning Policy Framework (NPPF) and the Arun Local Plan.
- 1.1.3. It is considered that the proposal achieves the required level of sustainability across all given criteria and delivers 10% of the sites energy requirements through design efficiency and renewable energy.
- 1.1.4. This report should be read in conjunction with other consultant reports.

1.2. Description of Site

- 1.2.1. The site consists of 167 plots. These units comprise a range of apartments, detached, semi-detached and terraced houses.
- 1.2.2. The proposed site location/boundary for the whole site is shown in Appendix A.
- 1.2.3. This report addresses a domestic development being undertaken by Barratt Homes Southern Counties, and does not include any further proposals for subsequent developments or non-residential parcels.

1.3. Client Brief

- 1.3.1. The planning authority for this site is Arun District Council whose local plan sets standards for developments to aspire to. Policy ECC SP2 of Arun Local Plan requires major developments to reduce their energy demand by 10%. The policy extract can be found below:

Policy ECC SP2

Energy and climate change mitigation

All new residential and commercial development (including conversions, extensions and changes of use) will be expected to be energy efficient and to demonstrate how they will:

- a. Achieve energy efficiency measures that reflect the current standards applicable at the time of submission;*
- b. Use design and layout to promote energy efficiency; and*
- c. Incorporate decentralised, renewable and low carbon energy supply systems, for example small scale renewable energy systems such as solar panels.*

All major developments ⁽⁴⁷⁾ must produce 10% of the total predicted energy requirements from renewable or low carbon energy generation on site, unless it can be demonstrated that this is unviable. Energy efficiency measures will be taken into consideration when the total predicted energy requirements are calculated. The Council will consider 'allowable solutions' where it is clearly demonstrated that the provision of on site renewable or low carbon energy generation is unviable or not feasible.

- 1.3.2. The sustainability appraisal has been summarised under the following categories:

- *Water Resource Management*
- *Flood Risk*
- *Ecology and Biodiversity*
- *Responsibly Sourced and Recycled Materials*
- *Construction Waste*
- *Operational Waste and Recycling*
- *Sustainable Travel*

- 1.3.3. This report addresses each category in turn and summarises the strategy adopted to confirm compliance.

1.4. Building regulations

- 1.4.1. The proposed development is currently being assessed according to the SAP 2012 methodology in accordance with Part L1A 2013 of the building regulations. The specifications improvements, mentioned in sections 2.3, 2.4 and 3.7 of this report, help the site in achieving both minimum Part L1A building regulation compliance, as well as meeting the energy and carbon targets set in the local policy at the time the report is written.
- 1.4.2. It should be noted however, that if this proposed development was submitted again at a later date, then the site may fall under the new Part L1A 2021 regulations which will have a higher standard in carbon requirements and energy demand. Specifically, any plots on site which are to be built to the part L 2021 (using SAP 10) will exceed current carbon emissions targets by 31%.
- 1.4.3. In addition to the higher standards, some of the carbon content for different types of fuel will be changing, meaning that the resultant carbon emissions will be calculated differently. For reference, see the tables in appendix C for the SAP 2012 and SAP 10 carbon factors. However, any plots within a development that will need to achieve the new standard of carbon and energy efficiency will exceed the requirements set out in Policy ECC SP2 of the Arun local plan as they will be built to comply with Part L1A 2021, which represents a 31% uplift against current Part L1A 2013 requirements.

2. Energy Assessment

2.1. Assessment Methodology

2.1.1. Environmental Economics have modelled the proposed dwellings using the software Design SAP 2012 by Elmhurst and approved by BRE. The software provides a number of outputs, and based on the provided specification for this proposed development, we are able to assess the following areas for our calculations:

- *Building regulations compliance*
- *Energy usage per year (kWh/annum)*
- *Carbon emissions as a measure of building regulations compliance (kg CO₂/m²/year)*
- *Energy costs per year (£/annum)*
- *More detailed breakdowns by end use (space heating, water heating, cooking, lighting, appliances)*
- *Code for Sustainable Homes compliance*
- *Effective air change rate*

2.1.2. Each of these outputs can be used in different ways to analyse the performance of the dwelling. The total regulated carbon emissions for each property is based upon:

- *Space heating*
- *Water heating*
- *Electricity for pumps and fans*
- *Electricity for lighting*

2.1.3. Two models were created in order to calculate the energy demand. The first is a baseline model, which represents the minimum compliance required. The second model represents the specification used for this proposed development. Comparing these two models will provide the level of improvement from the proposed developments specification over building regulations. In order to achieve this representative house types that reflect the house types that have been proposed in this development have been utilised.

2.1.4. The calculations for determining the energy requirement, and the carbon production, for this proposed development has been assessed using the Standard Assessment Procedure (SAP 2012) through the Design SAP software. These calculations determine the energy requirement and the carbon production for multiple services used within the proposed development and include: the space and water heating, electricity for pumps, fans and lighting. The SAP worksheets used in this energy report are shown in Appendix J.

2.2. Design Philosophy

2.2.1. Upgrades have been made to a number of elements from a standard build specification in order to improve energy efficiency across the proposed development, the specifics of which can be viewed in section 2.3, 2.4 and 3.7 of this energy report. The proposed development adopts the good design principles endorsed and promoted by The Zero Carbon Hub, the construction industries' key advisors and partners with the Governments Communities and Local Government Department. This guidance follows the general good principles of energy efficiency as the industry moves towards zero carbon. The principles are illustrated in figure 1 below.

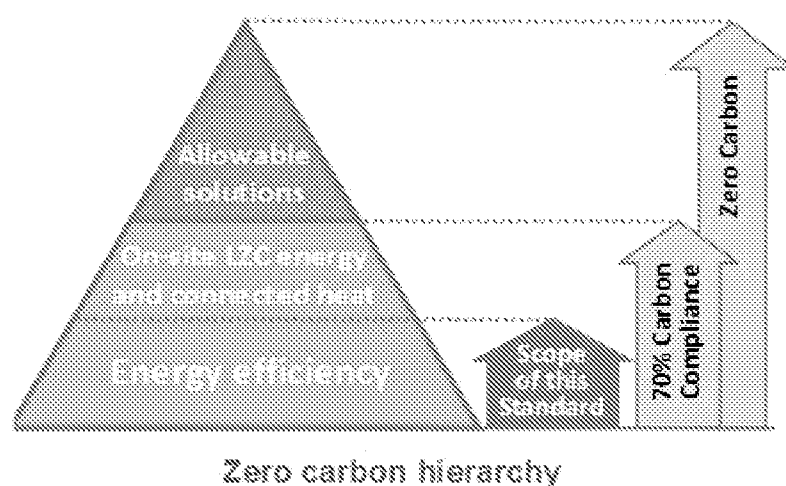


Figure 1

2.2.2. In order to reduce the residual carbon emissions a number of improvements were made to the standard material and product specification. These improvements include:

- *Upgraded heating and hot water controls*
- *Delayed start thermostat*
- *Design air permeability of 5.01m³/hr/m²*
- *Bespoke thermal bridging details*

2.3. Building Services

- 2.3.1. The systems used in a property to supply hot water and heating, as well as control it, are important to the overall energy demand of a property. The 2013 Building Regulations state that all systems and their controls must adhere to the minimum standards shown in Domestic Heating Compliance Guide.
- 2.3.2. For a mains gas fired system the minimum boiler efficiency required is 86%. High efficiency condensing boilers have been specified throughout the site for both combination and cylinder based systems. These boilers achieve a SAP 2012 rated efficiency of at least 89.4% and are recommended by the Energy Saving Trust.
- 2.3.3. Where installed, hot water cylinders can lose a significant amount of energy. In order to minimise this energy loss and corresponding carbon emissions, cylinders which have higher levels of insulation in comparison to typical hot water cylinders will be used.
- 2.3.4. Lighting provision will be from low energy fittings achieving a minimum efficacy of 45 lamp lumens per circuit watt.

2.4. Fabric Improvements

2.4.1. The building fabric for all dwellings within the proposed development have been improved in relation with basic compliance Part L1A 2013 notional specification to an enhanced specification. These fabric improvements reduce the space heating requirement upon a property. The improvements have been made through a combination of upgraded materials and increased insulation thicknesses. Enhanced glazing with a larger transmittance factor allowing for increased solar gains will also be used. Changes to the U-Value of external elements are shown in table 1 below.

<i>Element</i>	<i>Minimum Standard</i>	<i>Improved Potential Specification</i>	
-	<i>W/m²k</i>	<i>Description</i>	<i>W/m²k</i>
Walls	0.30	Masonry - 50mm Alreflex Platinum Cavity	0.27
Roof	0.20	400mm Mineral Wool Horizontal Ceiling, Loft Space	0.11
		Flat Roof	0.18
Floors	0.25	150mm TE Platinum Insulation	0.13 - 0.16
Doors	2.00	Double glazed Low-E, u-PVC frame	1.00 – 1.70
Glazing	2.00	Double glazed Low-E, u-PVC frame	1.41

Table 1

2.4.2. As improvements are made to the thermal conductivity of main elements, thermal bridging and air permeability becomes increasingly significant in the overall fabric performance. Bespoke thermal bridging designs have been utilised, which achieve much lower heat loss levels in comparison with standard practice.

2.4.3. As a result of following these junction details and focusing on build quality air permeability will also decrease. A target air pressure rating of 5.01m³/hr.m² has been set for all houses on site which is a 50% improvement on the maximum allowable rating in the 2013 Building Regulations.

3. Low and Zero Carbon Technologies

3.1.1. The following section will outline various renewable technologies and assess their suitability for this scheme.

3.2. Photovoltaic (PV) Cells

3.2.1. The efficiency of PV cells has improved rapidly over the last 15 years. This has made a previously uneconomical technology an increasingly viable solution to rising energy costs and demand. The cells can be produced in a variety of formats but are typically manufactured as a panel or a roof tile for domestic housing applications.

3.2.2. The PV system typically produces direct current (DC) which is then sent through an inverter to supply the house with electricity. If a greater amount of electricity is produced than used by the household, this extra can be exported to the national grid, as can be seen in figure 2.

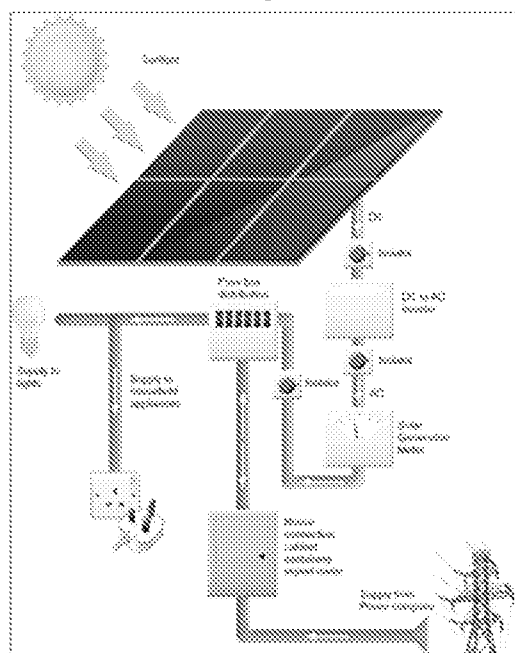


Figure 2

3.2.3. A PV cell is assessed on its peak power rating. This is tested by exposing the cell to the equivalent of full solar radiation and measuring the power output. The peak power is input into the Design SAP software as well as the physical attributes of the installation such as pitch, orientation and over-shading. A total energy saving per year can then be calculated through SAP for the PV installation. This is then offset against the electricity energy demand for the house.

3.3. Solar Hot Water (SHW)

- 3.3.1. SHW systems generate energy which is used to heat stored water (in a special solar hot water cylinder) which offsets the energy required for the boiler, thereby reducing fuel use and reducing carbon emissions. Therefore SHW systems are ideally utilised when the design of a dwelling already calls for a hot water cylinder, and not when a combination boiler is specified.
- 3.3.2. There are two main SHW systems; evacuated tubes and flat plate collectors. Evacuated tubes are more efficient at transferring solar irradiation to the fluid although flat plate collectors are considered to be better aesthetically and to install. An example of the latter can be seen in figure 3.



Figure 3

- 3.3.3. The final energy contribution to the household, calculated through SAP, is based on a number of factors:
- *Pitch, orientation and over-shading*
 - *Heat absorption efficiency for the collector*
 - *Average hot water usage of the dwelling*
- 3.3.4. The majority of the energy savings will be made in the hot water demand for the dwelling however, adding a SHW system will impact upon other energy demands.

3.4. Air Source Heat Pumps (ASHP)

- 3.4.1. ASHP provide heating and hot water to a home through thermal energy gathered from air outside the dwelling. Systems can be designed to work in conjunction with a boiler system but in the case of energy efficient new builds it is possible for an ASHP unit to provide 100% of the heating and hot water demand.

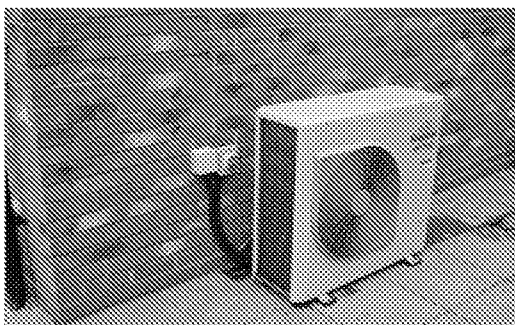


Figure 4

- 3.4.2. The thermal performance of the unit depends on the outside temperature as well as the unit's Coefficient of Performance. This is the ratio of thermal energy produced to energy used. A typical value for this would be around 3.5, meaning that for every 1kW of electricity consumed the unit would provide 3.5kW of thermal energy to the household. This efficiency leads to large carbon and energy savings for both space and water heating.
- 3.4.3. ASHP are assessed by their power output and the size of unit chosen depends on the demand from the household. An example external unit can be seen above in figure 4. The units with a larger power output can provide a larger amount of hotter water even in colder climates.

3.5. Ground Source Heat Pumps (GSHP)

- 3.5.1. GSHP provide heating and hot water to a dwelling through geothermal effects. A GSHP system would offset the energy demand from the main space heating. There is, however, an additional electricity demand for the pump and control system. This would reduce energy savings from the installation.

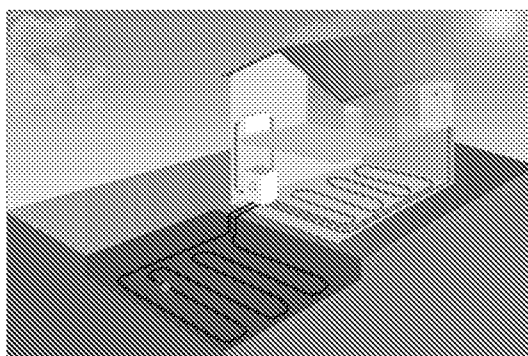


Figure 5

- 3.5.2. GSHP are expensive to install and rely on having appropriate ground conditions and suitable space around the dwelling for the pipe looping. Energy savings are dependent upon the type of system being replaced and the way the system is operated by the homeowner. A typical system can be seen above in figure 5.

3.6. Biomass Heating Systems

- 3.6.1. Biomass heating systems burn fuels, considered carbon neutral, to heat the water required for a dwelling. There are a large variety of systems available and choice depends on the type of fuel to be burned and the level of automation.
- 3.6.2. The system would offset the energy demand from the hot water and main space heating. However, biomass systems typically require a large amount of maintenance and monitoring. An example system can be seen in figure 6.

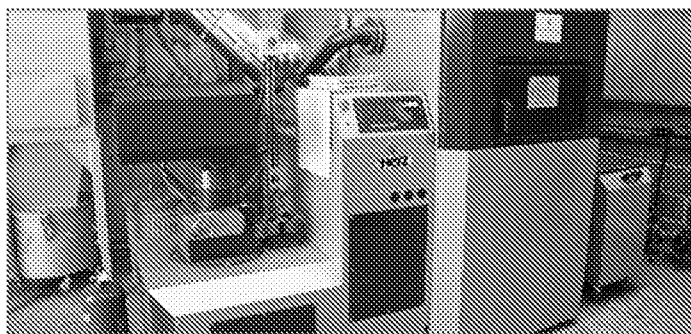


Figure 6

- 3.6.3. The savings from such a system, in terms of CO₂ and money, depends upon what it is replacing. The savings are greatest when replacing an electrical hot water system but are considerably less for replacing mains gas.

3.7. Wind Turbines

- 3.7.1. Wind turbines provide electricity directly to a dwelling. They can be added to a property in two ways: pole mounted or building mounted. The pole mounted systems are free standing and therefore require enough space around them to allow for the construction and maintenance of the structure, as well as to allow for efficient operation. The building mounted systems have a lower power output but do not require additional structures, as can be seen in figure 7.



Figure 7

- 3.7.2. The energy produced from a wind turbine is heavily dependent upon the surrounding landscape. The energy saved will be offset against the electricity usage of the dwelling.

3.8. Comparison

- 3.8.1. SHW can be incorporated into newbuild dwellings where the design calls for a boiler and cylinder system. In this situation a SHW system can provide up to 50% of the hot water demand. Where the dwelling design utilises a combination boiler (and therefore no cylinder) the dwelling will require a fundamental redesign and therefore this present additional challenges.
- 3.8.2. The product and installation cost make ASHP an expensive option. There is also a degree of uncertainty about the energy saving that can be obtained from the system as it requires diligent operation. The same can be said of GSHP, as well as the fact that additional extensive ground work is required in order to make use of the system.
- 3.8.3. Biomass hot water systems are more suited to the replacement of inefficient, carbon heavy systems such as electrical immersion heaters. The requirement of maintenance and monitoring makes it unsuitable for large scale new build developments
- 3.8.4. The density of the site is a major restriction on the potential energy that could be generated from wind turbines. Surrounding houses and the urban location would restrict wind speeds.
- 3.8.5. The solution of PV panel systems could be used for this development. A total of 123kWp, in an average orientation of South East/South West, could be used to aid in meeting the requirement. Combining the fabric and PV improvements, the 10% energy demand target for across the site can be achieved.
- 3.8.6. For the purpose of the report this amount of PV has been distributed amongst the 2BF Detached, 2BF End-Terrace, 2BF Mid-Terrace, Alderney Detached, Alverton End-Terrace, Apartment Flats, Hesketh Detached, Moresby Detached, Radleigh Detached and the Type 51 housetypes. The amount of PV allocated to the housetypes mentioned above can be found in appendix I.
- 3.8.7. PV could be distributed in alternate orientations, as long as the total reduction in energy demand remains above 10%. The final distribution and design of the PV, or alternative renewable solution, will be subject to future reserved matters application and/or dealt with via a planning condition. This report provides evidence that the site can reduce the energy demand by at least 10% against baseline target energy demand figures, by using a combination of fabric and renewables improvements, if required by the planning policy.

4. Sustainability Appraisal

4.1. Water Resource Management

- 4.1.1. The criteria for measuring potable water usage are set out in Approved Document G of the Building Regulations.
- 4.1.2. Building Regulations sets an optional internal potable water consumption target for residential developments of 105 litres or less per person per day.
- 4.1.3. The development has been designed for efficient water use. All dwellings on site can be designed to achieve the maximum of 105 litres per person per day internal potable water, with an additional allowance for external water use of 5 litres per person per day. The total water consumption estimate is 110 litres per person per day. The specification of water fittings will be identified at the detailed design stage.
- 4.1.4. Representative data has been input into the BRE's Water Efficiency Calculator for New Dwellings for relevant domestic water consuming components; dual flush WC, taps and kitchen sink taps, bath and shower. Washing machine and dishwasher specification have been set to default rates as standard practice.
- 4.1.5. The following representative rates have been utilised:
 - 4.1.6. *Dual Flush WC – 4L & 2.6L flush volumes*
 - 4.1.7. *Taps – 5L per minute flow rate*
 - 4.1.8. *Bath – 175L overflow capacity*
 - 4.1.9. *Shower – 8.9L per minute flow rate*
 - 4.1.10. *Kitchen sink taps – 5L per minute flow rate*
- 4.1.11. Alternative component consumption rates are available which can achieve the required water consumption. The rates provided are representative only.
- 4.1.12. The calculator can be found in Appendix E.
- 4.1.13. The calculated results show that utilisation of the representative component's water consumption can achieve a maximum of 105 litres per person per day internally, and external water use of 5 litres per person per day, meeting the aspirational target.

4.2. Flood Risk

- 4.2.1. Appendix D shows the Environment Agency Flood Risk Map for the site location.
- 4.2.2. The location is within Flood Zone 1, the lowest probability evaluated by the Environment Agency. Flood Zone 1 is defined as land with less than 1 in 1000 annual probability of river or sea flooding. Zone 1 is considered best practice for a sustainable site that would be resilient to climate change.
- 4.2.3. See separate flood risk assessment and SuDS strategy for full details including analysis of flood risk from all potential sources, mitigation measures where appropriate and allowances for expected climate change, to consider future sustainability.
- 4.2.4. It is understood that a SuDS management strategy is likely to be implemented for the site. The management strategy is designed to ensure the SuDS features are maintained in the future and remain effective.
- 4.2.5. By following the measures listed within the flood risk assessment and SuDS strategy, it is understood that surface water run-off can be managed effectively.

4.3. Ecology and Biodiversity

- 4.3.1. The development has been designed in coordination with an ecologist to prioritise biodiverse outcomes including: tree cover, shrub and flower planting and diverse habitats where appropriate.
- 4.3.2. See separate ecology report for full details of biodiversity analysis and planned measures. Any potential ecological constraints, recommendations and mitigation measures where appropriate are detailed within the separate ecology report.
- 4.3.3. It is likely that a management plan is to be implemented to outline on-going management measures to preserve the site's ecological outcomes. Producing a management plan for the development promotes future sustainability with long-term management of ecological factors.
- 4.3.4. The landscape strategy includes incorporating trees, hedgerows, planting and green spaces into the site layout. This design provides numerous environmental and social benefits including ecological value and visual amenity.
- 4.3.5. The overall ecology and landscape strategies are considered to promote healthy and sustainable lifestyles such as enabling exercise and leisure opportunities with green spaces, reducing the need for future residents to travel further afield. In addition, the design incorporates measures to promote biodiversity.

4.4. Responsibly Sourced and Recycled Materials

- 4.4.1. Barratt Homes has an established network of responsible sourcing certified suppliers that have been carefully selected to align with sustainability and responsible sourcing policies.
- 4.4.2. Materials used within construction of the proposed development will be at a certified standard, proving the materials sourced have been done so with sustainability in mind.
- 4.4.3. Responsible sourcing of materials can come in a variety of certifications including: BES 6001, FSC, PEFC and EMS. Appendix F shows a sample of Barratt's typical suppliers with material responsible sourcing certification in the form of BES 6001 Framework Standard for Responsible Sourcing:
- 4.4.4. Wallboard supplier, British Gypsum – BES 6001 Excellent
- 4.4.5. Brick supplier; Ibstock Brick – BES 6001 Excellent
- 4.4.6. Aggregate/cement product supplier, Tarmac – BES 6001 Excellent
- 4.4.7. Appendix G shows the Sustainable Procurement Policy implemented by Barratt. The policy sets a high standard of sustainability when sourcing materials. The policy prioritises products that have recycled content consistent with the WRAP recycled content product guide and are responsible sourcing certified.
- 4.4.8. The Green Guide is used to examine the environmental impact of the construction materials commonly used within dwellings. The standard specification of materials used by Barratt Homes consists of predominantly 'A' and 'A+' Green Guide rated elements. 'A+' rated construction elements include: pitched roof construction, internal upper floors, internal timber partitions and external cavity walls.
- 4.4.9. Table 2 on the following page shows a sample of materials typically used by Barratt Homes and the respective Green Guide rating.

Table 2

Element	Green Guide Equivalent (online)	Code	Rating
Ground Floor Option A (Beam and Aircrete Block)	Screed on insulation laid on grouted beam and Aircrete block flooring.	820140014	B
Ground Floor Option B (Ground Bearing)	Powerfloated in situ concrete slab, over insulation on polyethylene DPM laid on blinded virgin aggregate sub-base	820100202	C
Internal Upper Floors	Chipboard decking on timber I joists	807280024	A+
Wall – External Cavity (single & 2 storey) – Brick	Brickwork outer leaf, insulation, Aircrete blockwork inner leaf, cement mortar, plasterboard on battens, paint	806170615	A+
Wall – Internal Partition (timber) non loadbearing	Timber stud, plasterboard, paint	809760003	A+
Wall – Internal Partitions (masonry) (Used in very small number of cases)	Medium dense solid blockwork, plasterboard, paint	809180008	B
Wall – Party (cavity)	Robust Detail E-WM-20: Twin leaf 100mm min. solid medium dense blocks (1350-1600kg/m ³), with 100mm min. cavity including proprietary glass wool acoustic roll, type A wall ties, with gypsum-based board (9.8kg/m ²) on dabs and paint to each side	1118190007	C
Windows	PVC-U window with steel reinforcement, double glazed	813100009	A
Insulation	Glass wool insulation - density 12 kg/m ³	815320001	A+
Pitched Roof	Timber trussed rafters and joists with insulation, roofing underlay, counterbattens, battens and concrete plain tiles	812410017	A+

4.5. Construction Waste

- 4.5.1. Appendix H shows an extract of Barratt's Sustainability Framework 2020+ that sets targets for waste management including at least 95% construction waste diverted from landfill as well as continued reductions in construction waste intensity.
- 4.5.2. The scheme aims to use waste reduction procedures to enable waste reduction and diversion of waste from landfill. The goal is to minimise waste and maximise re-use of resources in response to climate change. Barratt achieved 97% of construction waste diverted from landfill in 2018 and Barratt's Sustainability Framework 2020+ sets targets to continue diversion from landfill and reduce construction waste intensity.

4.6. Operational Waste and Recycling

- 4.6.1. Arun District Council offers comprehensive waste and recycling services including household collections for paper, cardboard, foil, glass, metal cans, cartons and plastic bottles. The development has been designed to accommodate the space for storage and collection of waste and recyclables.

4.7. Sustainable Travel

- 4.7.1. Walking and cycling have been considered in the design of the site layout. The layout encourages walking with footpaths that are well-lit, overlooked by houses for natural surveillance, have visually pleasing landscaping and provide walking links to the local area.
- 4.7.2. Within the surrounding area are a number of towns that provide numerous amenities for future residents.
- 4.7.3. The nearby town of Angmering provides a medical centre, schools, restaurants and convenience stores. Public transport links are also available such as Angmering train station with links to London, Brighton, Portsmouth and Southampton amongst others.

5. Conclusion

5.1.1. The tables presented in Appendix B shows reduction in energy requirements achieved through design efficiency and renewable technology.

5.1.2. The results from the calculated models are the following:

• <i>Notional Energy Demand (Baseline)</i>	<i>1,067,630 kWh/yr</i>
• <i>Calculated Energy Demand (Actual)</i>	<i>959,315 kWh/yr</i>
• <i>Energy Reduction</i>	<i>108,314 kWh/yr</i>
• <i>Percentage Energy Reduction</i>	<i>10.1%</i>

5.1.3. The sustainability appraisal finds that the development has considered potential impacts and proposes mitigation measures by consulting with experts from each respective discipline. Full details are found in each respective report.

5.1.4. As shown in Appendix B, the average energy demand reduction meets the required 10% minimum reduction threshold across the site. Therefore the energy report shows that the proposed site achieves the planning condition required by the Arun District Council.

5.1.5. A water consumption calculation has been made to the aspirational target of 105 litres/person/day internally and 5 litres externally.

5.1.6. Flood risk, drainage and ecology have been considered in the design.

5.1.7. Construction elements are rated by the Green Guide with majority A and A+ ratings and product suppliers are certified by responsible sourcing schemes.

5.1.8. Established waste management procedures and targets support sustainable construction activities.

5.1.9. The residential site at Rustington Golf Centre is found to present a positive sustainable development based on the assessed criteria.