

Sustainability Statement

Imperial Gardens

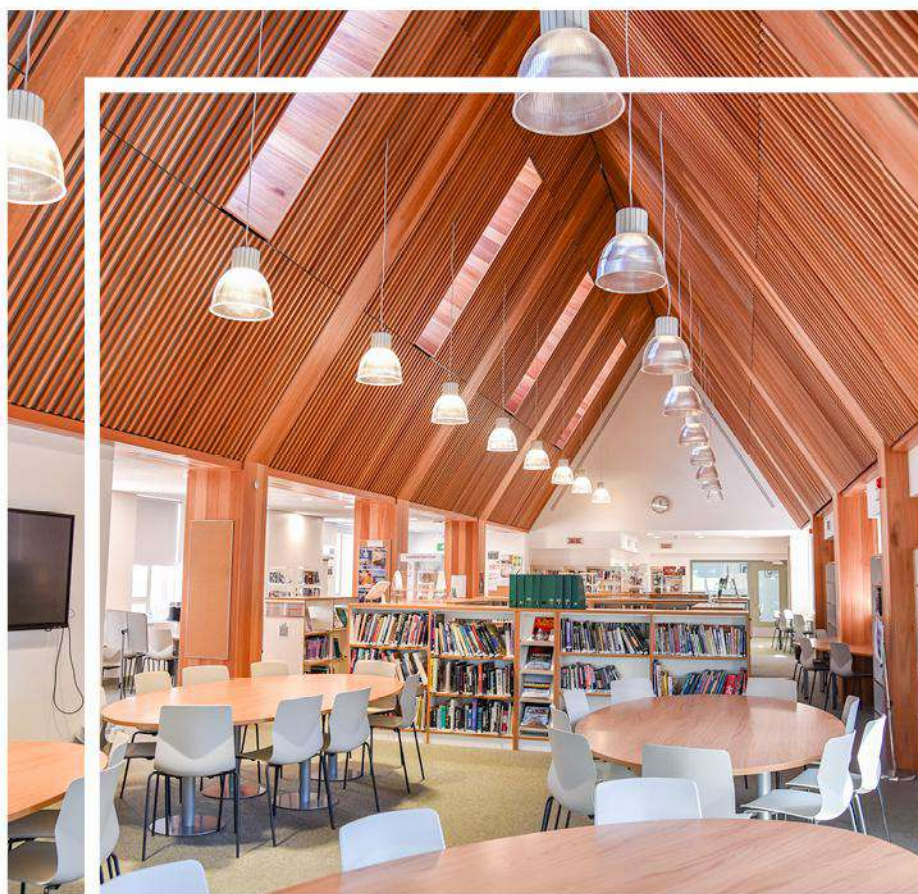
Hythe Imperial Hotel

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Imperial Gardens
Sustainability Statement
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13 February 2026

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1. Executive Summary

This Sustainability Statement has been prepared by Hilson Moran to accompany a hybrid planning application for the development at Hythe Imperial Hotel and redevelopment of land east of existing Hotel. The application is submitted on behalf of Hythe Imperial Hotel.

The Project will comprise of the proposed development at Hythe Imperial Hotel and Hythe Golf Course ('the Site'). The scheme includes a residential development on the western half of the existing golf course, a new academy golf course and associated club building to the west, a new adventure golf course, a leisure club, including a 25m pool and 2no fitness studios with associated changing facilities, remodelling and construction works to the western wing of the existing Hotel to provide up to 24no additional hotel rooms and 8 no. new serviced apartments and spa facilities. The public realm and landscaping scheme will include a heritage trail, SuDs, children's play facilities, a new public park and associated parking ('the Proposed Development').

This Sustainability Statement identifies how sustainability is a priority in the development. It outlines how the Proposed Development at Hythe Imperial Gardens aligns with national and local sustainability policies. Sustainability is at the forefront of the design. This report identifies how it is aligned with Folkestone & Hythe District Council Net Zero Toolkit¹. The strategy adopts a fabric-first approach, prioritising energy efficiency, low-carbon heating, and renewable energy generation.

- Non-Residential (Full):** Full energy modelling has already been undertaken to demonstrate compliance with all relevant local and national standards. The design also follows the core principles set out in the Folkestone & Hythe District Council Net Zero Toolkit. A BREEAM 'Excellent' rating is targeted for all non-residential buildings, with air source heat pumps proposed as low-carbon technologies, photovoltaic panels as renewable generation, and efficient building services fully integrated into the design.
- Residential (Outline):** The development is aspiring to align with the Future Homes Standard² (subject to final adoption), that achieves high levels of fabric performance, and adopts a fabric-first approach. The development will follow the Energy Hierarchy (see Figure 1), and the core principles outlined in the Folkestone & Hythe District Council Net Zero Toolkit. The scheme is aspiring to achieve a development that pushes beyond current policy.

- Site-wide strategy:** The Site aligns with the core principles of site-wide sustainability set out in the Folkestone & Hythe District Council Net Zero Toolkit. This includes key considerations such as site appraisal, a retrofit-first approach, site layout and orientation, sustainable transport provision, blue and green infrastructure, and community-focused measures.

While the Proposed Development is not formally targeting Net Zero, it is guided by the principles and KPIs set out in the Net Zero Toolkit (see Table 1). These indicators inform design decisions and help drive improvements in energy performance, embodied carbon, and long-term operational efficiency. This approach aims to move the scheme as close as practicable to the aspirations outlined in the Net Zero Toolkit; while also ensuring it remains economically viable and affordable for future occupants.

Table 1 Folkestone & Hythe District Council Net Zero Toolkit: Key Performance Indicators / New Buildings

	KPIs New apartments	KPIs New commercial
Energy demand	Space heating demand 15 kWh/m2 /yr or a heating load of 10 W/m2	
Energy consumption	Energy Use Intensity	
	35 kWh/m ² /yr	70* kWh/m ² /yr
Renewable energy	Electricity generation 120 kWh/m2 fp/yr (m ² fp:m ² building footprint)	
Embodied carbon	Upfront carbon good practice benchmark	
	500 kgCO ₂ e/m ² /yr	600 kgCO ₂ e/m ² /yr
Water consumption	95 litres/person/day	10 litres/person/day

¹ The Folkestone & Hythe District Council Net Zero Toolkit: [Net zero toolkit | Folkestone & Hythe District Council](#)

² The Future Homes and Buildings Standards: 2023 consultation. [The Future Homes and Buildings Standards: 2023 consultation - GOV.UK](#)

Route to Net Zero



Energy Strategy: Full energy modelling for the non-residential elements demonstrates compliance with all relevant standards, delivering energy efficiency, low-carbon heating, and on-site renewables that achieve at least a 10% reduction beyond the Target Emission Rate. The residential elements will also follow the Energy Hierarchy (see Figure 1), with detailed energy modelling to be completed at later design stages.

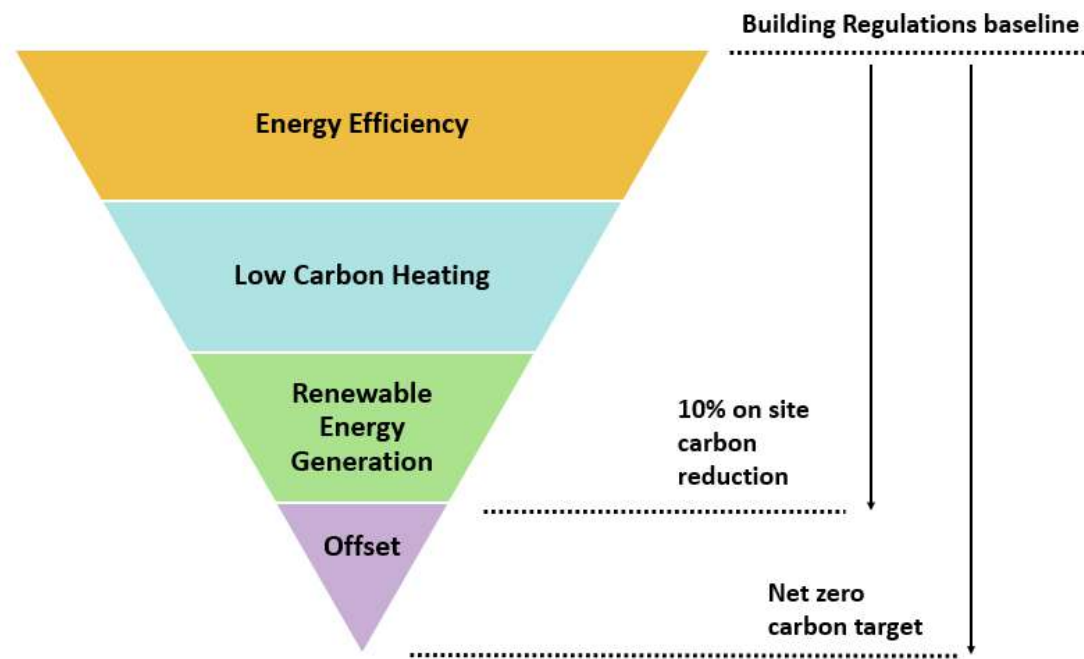


Figure 1 Energy hierarchy design approach for the Proposed Development

- **Energy Efficiency:** The Proposed Development adopts a fabric-first approach to minimise energy demand and meet Part L 2021, Future Homes Standard, and works towards the Net Zero Toolkit expectations. Highly efficient, all-electric building services, smart controls, and natural ventilation are prioritised, supported by dynamic thermal modelling (for non-residential elements submitted in full) to validate performance and reduce CO₂ emissions.

Table 2 Proposed Building Fabric Performance

Building Element	Proposed Targets (W/m ² .K)	
	Residential	Non - residential
External wall	0.18	0.18

Building Element	Proposed Targets (W/m ² .K)	
	Residential	Non - residential
Roof	0.11	0.15
Floor	0.13	0.15
Window	1.20	Hotel and Spa Extension and Leisure Building: 1.20 Golf Building: 1.14
Air Permeability m ³ /m ² .hr@50Pa	≤ 3 m ³ /(h·m ²) at 50 Pa	≤3 m ³ /(h·m ²) at 50 Pa

- **Low Carbon Heating:** Following the Folkestone & Hythe District Council Net Zero Toolkit, electric heating systems including heat pumps are proposed for the scheme.
- **Renewable Energy Generation:** The Proposed Development will maximise on-site renewable energy to achieve at least a 10% carbon reduction beyond the Target Emission Rate, in line with Policy CC1 of the Folkestone & Hythe District Council Local Plan (2020).

Table 3 below outlines the energy efficiency and Low Carbon Heating (ASHP) improvements achieved over the Building Regulations baseline **for the non-residential elements**, including Spa and Hotel Extension, Leisure Building and Golf Building, which are submitted in full detail as part of this hybrid planning application.

Table 3 Energy Efficiency and Low Carbon Heating Improvements over Building Regulations Baseline: Non-Residential Elements

	Part L 2021 Target Emission Rate (TER) - Notional kg CO2/m ² .annum	Part L 2021 Building Emission Rate (BER) - Proposed	% Improvement
Non-residential elements (Spa and Hotel Extension, Leisure Building, Golf Building)	16.90	16.72	1.06%

Table 4 below outlines the improvements achieved with on-site renewable technologies (PV) over the Building Regulations baseline **for the non-residential elements**, including the Spa and Hotel Extension, Leisure Building, and Golf Building, which are submitted in full detail as part of this hybrid planning application.

Table 4 Improvements achieved with on-site renewable technologies (PVs) over Building Regulations Baseline: Non-Residential Elements

	Part L 2021 Target Emission Rate (TER) - Notional kg CO2/m ² .annum	Part L 2021 Building Emission Rate (BER) - Proposed	% Improvement
Non-residential elements (Spa and Hotel Extension, Leisure Building, Golf Building)	16.90	14.92	11.70%

Embodied Carbon:



Life Cycle Assessment: For the non-residential elements submitted in full detail, a BREEAM-aligned life cycle assessment was undertaken to evaluate and reduce embodied carbon, considering multiple options for superstructure, substructure, and hard landscaping. The appraisal assessed significantly different design scenarios over a 60-year period to identify major contributors and opportunities to minimise high-carbon materials and overall environmental impact.



Waste and Circularity: The project adopts a circular economy approach by retaining 78% of existing structures, reusing and recycling materials, sourcing locally, and designing for longevity, adaptability, and material efficiency. Targets align with BREEAM and GLA benchmarks, with estimated waste arisings calculated for demolition, excavation, and construction. Responsibilities will be embedded in RMAs and Employer’s Requirements to monitor performance and reduce carbon impacts.

Sustainable Procurement Approach: The Proposed Scheme includes a Sustainable Procurement Plan prioritising responsibly sourced, low-impact materials, local

procurement where possible, and verified implementation to support sustainable construction and supply chains.

Site Wide Sustainability



Climate change resilience: The Proposed Development incorporates passive design, high-performance fabric and adaptive shading to minimise overheating and ensure thermal comfort in line with Part O and BREEAM Hea 04. Flood resilience is embedded through a completed Flood Risk Assessment, a passed Sequential Test and a robust drainage strategy using SuDS, controlled runoff and climate-change allowances. Together, these measures ensure a safe, resilient and climate-adapted scheme.



Responsible Construction Management: The construction phase will be responsibly managed to protect local environmental quality, health, and safety. For the detailed non-residential elements, the scheme targets all BREEAM Man 03 credits through robust site management, best-practice pollution prevention, strong EMS oversight, CCS/Man 03 compliance and BREEAM AP involvement.



Water: Water management plan and reuse systems to reduce reliance on potable water. Options for rainwater harvesting and attenuating storm water have been explored. Non-residential elements target all BREEAM Water credits, supported by smart metering, leak detection, and water-saving measures, with further strategies for low-flow fixtures and efficient irrigation to be developed in later stages.



Sustainable transport: The transport design prioritises sustainable access through enhanced pedestrian and cycle links, high-quality public realm, improved wayfinding, and EV-ready parking layouts across both the outline residential areas and the detailed non-residential elements. Together, these measures create a coherent and future-ready movement network that encourages active travel, reduces reliance on private vehicles, and supports the development’s overall environmental performance.

Blue and green infrastructure:



Flood Risk and Sustainable Drainage

A Flood Risk Assessment has been prepared confirming that the site is location within Flood Zones 1, 2 and 3 and addresses all sources of flood risk, focusing on coastal flooding. Mitigation includes a tertiary flood defence wall, raised floor levels, and a Flood Warning and Evacuation Plan. Surface water will be managed via SuDS (e.g., permeable surfaces, infiltration basins), and foul water will connect to the public sewer. The Proposed Development is considered safe, will not result in any increase in off-site flood risk, and is fully compliant with the requirements of the National Planning Policy Framework (NPPF), including Part B of the Exception Test. Non-residential elements target BREEAM Pol 03 credits through robust drainage strategies and climate change allowances (45%).



Urban Greening and Biodiversity

The Proposed Development includes habitat creation, SuDS, sensitive lighting and long-term management to deliver neutral to minor beneficial effects, with 10 BREEAM Ecology credits targeted for the non-residential elements. The Proposed Development is expected to deliver a net gain of 11.39 area habitat units (24.18% uplift) and an additional 0.99 linear hedgerow units, representing a 236.07% increase.



Community: The Proposed Development delivers a highly walkable, well-connected neighbourhood with strong pedestrian and cycle links, high-quality public realm and good access to sustainable transport. A mix of residential, hotel, leisure and commercial uses, together with active frontages and new public spaces, supports social interaction and community life. Inclusive design and community-driven activities help establish a vibrant and accessible place for all.

Beyond Net Zero – BREEAM



A BREEAM ‘Excellent’ rating is targeted for the Proposed Spa and Hotel Extension, the Proposed Leisure Building, and the Golf Building, assessed under BREEAM UK New Construction V6.1. Table 5 and Table 6 below outline the credit summary for each BREEAM assessment.

Although more than 85% of credits may be technically achievable when adding potential credits, an ‘Outstanding’ rating is not pursued. This is because one of the minimum requirements for an ‘Outstanding’ rating, achieving at least 6 credits under Ene 01, is extremely challenging for this scheme. As a result, an ‘Excellent’ rating remains the realistic and appropriate target for the development.

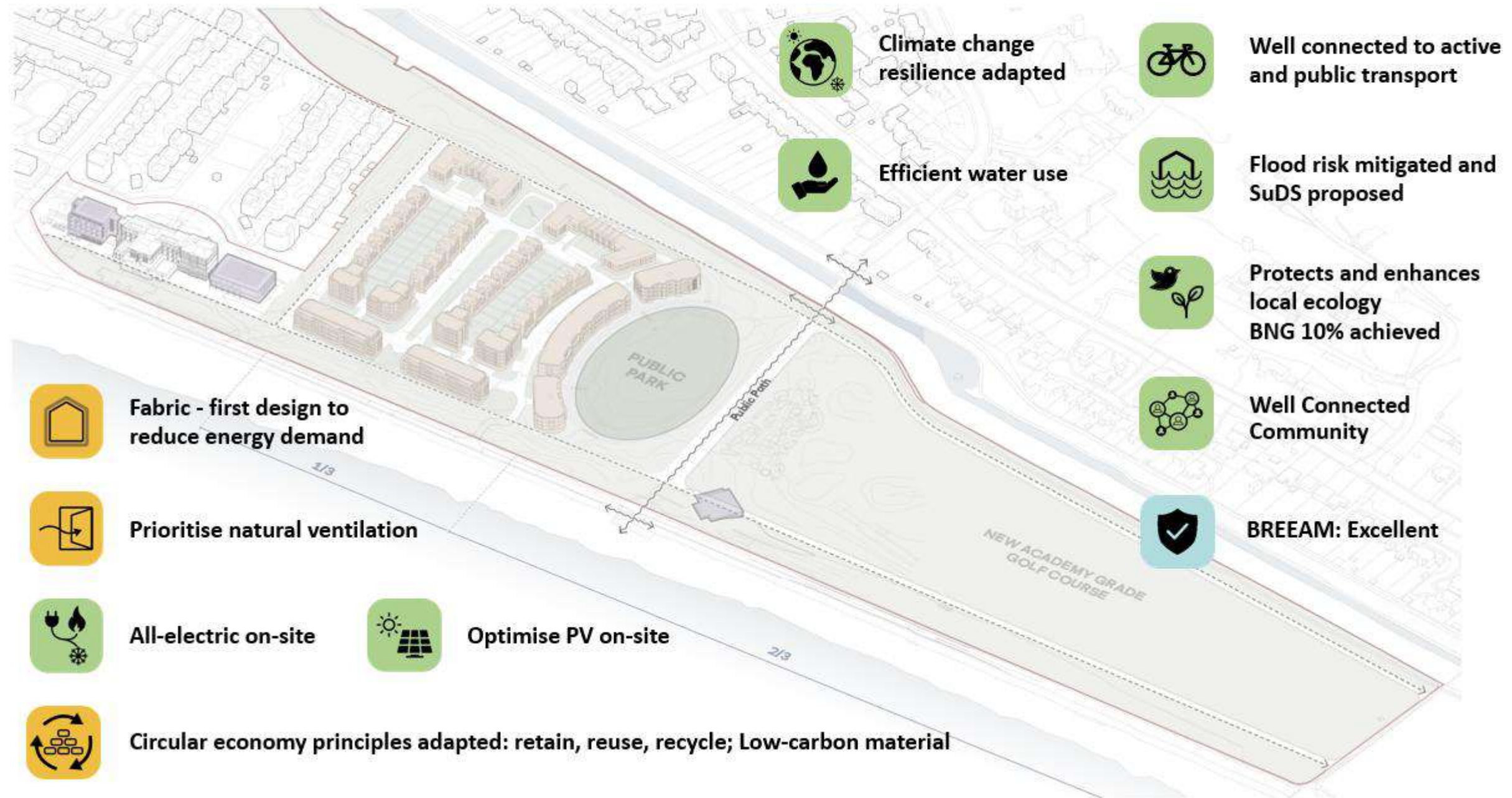
Table 5 BREEAM UK NC V6.1 credit summary: Spa and Hotel Extension, and Leisure Building

BREEAM UK NC V6.1 credit	Targeted	Potential	Difficult
Expected BREEAM Score	78.8%	89.0%	93.0%
Expected BREEAM Rating	Excellent	Excellent	Excellent

Table 6 BREEAM UK NC V6.1 credit summary: Golf Building

BREEAM UK NC V6.1 credit	Targeted	Potential	Difficult
Expected BREEAM Score	78.8%	89.2%	93.2%
Expected BREEAM Rating	Excellent	Excellent	Excellent

Hythe Imperial Hotel Sustainability Approach – Route to Net Zero



2. Introduction

This Sustainability Statement has been prepared by Hilson Moran to accompany a hybrid planning application for the development at Hythe Imperial Hotel and redevelopment of land east of existing Hotel. The application is submitted on behalf of Hythe Imperial Hotel.

The Project will comprise of the proposed development at Hythe Imperial Hotel and Hythe Golf Course ('the Site'). The scheme includes a residential development on the western half of the existing golf course, a new academy golf course and associated club building to the west, a new adventure golf course, a leisure club, including a 25m pool and 2no fitness studios with associated changing facilities, remodelling and construction works to the western wing of the existing Hotel to provide up to 24no additional hotel rooms and 8 no. new serviced apartments and spa facilities. The public realm and landscaping scheme will include a heritage trail, SUDs, children's play facilities and associated parking ('the Proposed Development').

The planning application will be a hybrid submission with outline consent being sought for the residential elements and all other elements being submitted in detail.

A hybrid planning application is being submitted for the following:

"Hybrid planning application consisting of full planning permission for

- (i) extensions to, and the redevelopment of the Hythe Imperial Hotel to provide additional hotel accommodation, a new spa facility and a public gym and swimming pool, and*
- (ii) the redevelopment of the existing golf course to provide a new leisure offering; including a 'academy' golf course and club house, an adventure golf course and splash park with associated access, parking, landscaping and other ancillary works.*

Outline planning permission for the erection up to 291 residential dwellings (Class C3) with all matters reserved except for the principal access from Princes Parade and Imperial Gardens."

2.1. The Site

The Site measures approximately 17.3ha and is located on the coast of Hythe within the administrative boundary of FHDC. The Site consists of the Hythe Imperial Hotel and Hythe Golf Club which includes an 18 hole golf course, by the Hythe Imperial Hotel. The Site is linear, approximately 800m in width.

The hotel is located in the south west of the Site and is a well established 92-bed 4 star hotel of four-five storeys fronting Princess Parade with associated landscaping and parking. The hotel comprises the main hotel building, which is an imposing Victorian four-

five storey building, and a more modern two storey brick building which forms the western wing and houses the hotel's existing leisure facilities. Adjacent to the east of the hotel car park is a small clubhouse, associated maintenance building and access track. Six small outbuildings/sheds are located along the boundary of the golf course, used primarily for maintenance and storage associated with the golf course's use.

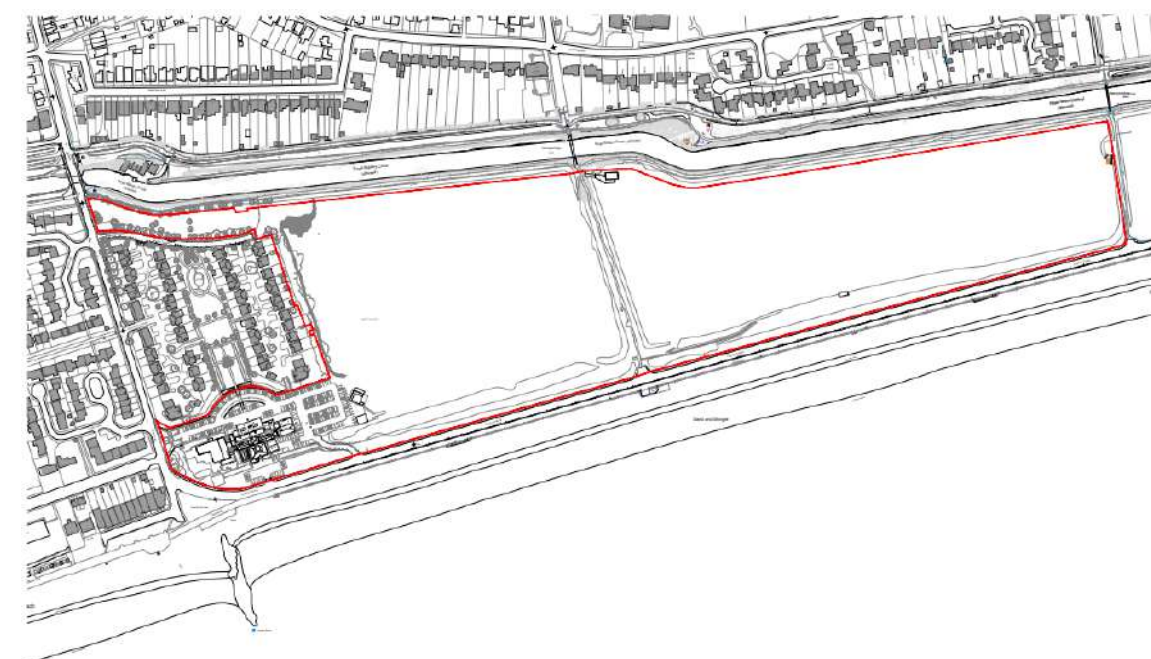


Figure 2 The Existing Site Plan, Hollaway Studio

2.2. The Proposed Development

The Proposed Development includes:

- Residential and leisure led mixed-use scheme, providing up to 291 residential units of which 25% (73 in total) will be affordable housing (delivered in outline).
- Remodelling and construction works to the western wing of the existing Hotel to provide up to 24no additional hotel rooms, 8 new serviced apartments and spa facilities.
- A new academy golf course (9-holes), associated club building and adventure golf course.
- A new leisure offering comprising a 4 lane 25m swimming pool, gym and studio facilities.
- Natural SuDS and ecological area.

- Public realm improvements including a new public plaza, splash park, public park and heritage trails.
- Public rights of way improvements, including enhanced access to the canal towpath to the north and Princes Parade Promenade to the south.
- Associated infrastructure and access works, providing vehicular access via Princes Parade at two points and a third pedestrian/cycle access. An emergency access point via Twiss Road is also proposed.
- Landscaping and associated parking.

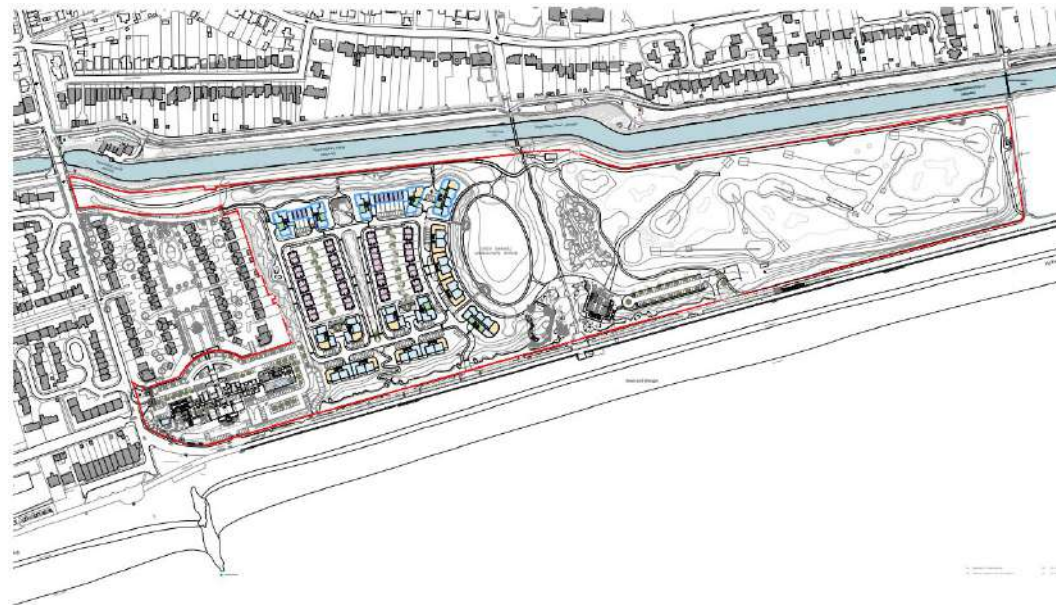


Figure 3 The Proposed Site Plan, Hollaway Studio

2.3. Purpose and Structure

This Sustainability Statement sets out the regulatory and policy context for sustainability at both national and local levels, and provides a framework for the sustainability strategy for the Proposed Development. It demonstrates how the scheme aligns with relevant

planning policy, climate objectives and how it works toward best practice guidance (i.e., Folkestone & Hythe District Council Net Zero Toolkit).

The report splits the sustainability into three sections

1. Side Wide Sustainability Strategy
2. Non-Residential Full Planning Application
3. Residential Outline Application

The report will highlight for each section how we are approach sustainability, how we align with policy and how we push the development further.

2.4. Relation to other documents

Ther report has been written with the support of specialists. To find more detail on specialists subjects the following report can be reviewed:

- Planning Statement (produced by Lichfields);
- Design & Access Statement (produced by Hollaway Studio);
- Circular Economy Statement (produced by Hilson Moran);
- Economic Benefits and Social Value Statement (produced by Lichfields);
- Landscaping Strategy/ Drawings (produced by Lloyd Bore);
- Flood Risk Assessment, including Sequential Test and Drainage Strategy (produced by EPS);
- Surface Water Management Strategy (produced by EPS);
- Environmental Impact Assessment:
 - Chapter D - Water Environment and Flood Risk (produced by Herrington Consulting);
 - Chapter F - Landscape and Views (produced by Lloyd Bore);
 - Chapter G - Ecology and Biodiversity (produced by Lloyd Bore);
 - Chapter L - Climate Change and Resilience (produced by Hilson Moran);
 - Chapter M - Socio-Economics (produced by Lichfields);

3. Regulatory and Policy Context

This section outlines the high-level conclusions of the key national, regional, and local regulatory and planning policy context related to sustainability and energy that should be considered for the proposed developments. Please refer to Appendix A for the full key policies.

3.1. National Policy

Climate Change Act 2008 ³	- Climate Change Act amended to require Net Zero by 2050 (100% reduction from 1990 levels). - Provides the legal framework for tackling climate change in the UK. - Includes legally binding carbon budgets as milestones towards the 2050 target.
Net Zero Strategy: Build Back Greener (2021) ⁴	- National framework to achieve Net Zero by 2050 - Phase-out of gas boilers and shift to clean electricity - Investment in low-carbon technologies (heat pumps, PV, EV) - Focus on electrifying heating and transport - Developments should incorporate renewable and low-carbon solutions
National Planning Policy Framework (NPPF) 2024 ⁵	- National planning framework for sustainable development. - Focus on climate change, environment and sustainable growth. - Presumption in favour of sustainable development: support efficient land use; approve compliant proposals; permit development unless harm outweighs benefits.
Planning Practice Guidance ⁶	- Guidance supporting NPPF - Key areas: climate, design, land use, environment, flood, housing, communities, transport/open space
Building Regulations Part L 2021 ⁷	- National energy efficiency & carbon standards (Part L 2021) - CO₂ reduction compared with Part L 2013: 30% (dwellings), 27% (non-domestic) - Improved fabric, energy targets, mandatory submissions - Step toward Future Homes Standard

³ Climate Change Act 2008: [Climate Change Act 2008](#)

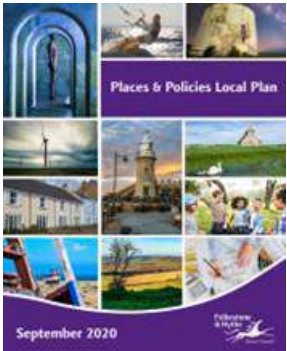
⁴ Net Zero Strategy: Build Back Greener: [net-zero-strategy-beis.pdf](#)

⁵ National Planning Policy Framework 2024: [National Planning Policy Framework](#)

⁶ Planning practice guidance: [Planning practice guidance - GOV.UK](#)

⁷ Building Regulations Part L 2021: [Conservation of fuel and power: Approved Document L - GOV.UK](#)

3.2. Local Policy

Places and Policies Local Plan (2020)⁸ 	• Policy C3 Provision of Open Space • Policy T1 Street Hierarchy and Site Layout • Policy T2 Parking Standards Residential Parking • Policy T5 Cycle Parking • Policy NE1 Enhancing Managing Access to the Natural Environment • Policy NE2 Biodiversity • Policy NE3 Protecting the District's Landscapes and Countryside • Policy NE5 Light Pollution and External Illumination • Policy CC1 Reducing Carbon Emissions • Policy CC2 Sustainable Design and Construction • Policy CC3 Sustainable Drainage Systems (SuDS) • Policy HB3 Internal and External Space Standards • Policy HW2 Improving the Health and Wellbeing of the Local Population and Reducing Health Inequalities • Policy HW3 Development That Supports Healthy, Fulfilling and Active Lifestyles • Policy HW4 Promoting Active Travel • Policy HE1 Heritage Assets • Policy HE2 Archaeology
Core Strategy Review (2022)⁹ 	• Policy SS1 District Spatial Strategy Develop on vacant land; provide green space • Policy SS3 Place Shaping and Sustainable Settlements Strategy Use previously developed land; flood risk assessment; preserve character & heritage; sustainable layouts; water & energy efficiency • Policy SS5 District Infrastructure Planning Minimise infrastructure strain; support sustainable travel; provide necessary infrastructure. • Policy SS8 New Garden Settlement - Sustainability and Healthy New Town Principles

⁸ Places and Policies Local Plan Adopted September 2020: [Places and Policies Local Plan Adopted September 2020](#)

⁹ Core Strategy Review (2022): [Folkestone & Hythe District Council Core Strategy Review 2022](#)

	Sustainable town: energy strategy (fabric-first, renewable, site-wide/decentralised); housing ≤110 L/person/day; non-residential BREEAM Excellent; EV-ready; waste strategy; soil-neutral construction; minerals & contaminated land assessment. Healthy town: promote active lifestyles; open spaces; mitigate noise/air pollution; provide allotments/community orchards; appropriate gardens in low/high density areas. • Policy CSD4 Green Infrastructure of Natural Networks, Open Spaces and Recreation Biodiversity gains; protect/enhance landscapes & soils; improve/manage green infrastructure. • Policy CSD5 Water and Coastal Environmental Management Maintain/improve water quality; SuDS/flood management; Stodmarsh nutrient mitigation; collaborate on water/coastal infrastructure. • Policy CSD7 Hythe Strategy Develop as high-quality residential, business, retail, tourist centre; respect historic character.
Kent Minerals and Waste Local Plan (2025)¹⁰ 	• Policy CSW 1 Sustainable Development Support waste developments in line with NPPF’s sustainable development presumption. • Policy CSW 2 Waste Hierarchy Manage waste at the highest practicable level unless LCA shows otherwise. • Policy CSW 3 Waste Reduction Follow circular economy principles: minimise waste, reuse structures, enable refurbishment, use recycled materials. Large developments must submit Circular Economy Statement. Provide adequate storage, collection, and contingency plans. • Policy CSW 7 Waste Management for Non-hazardous Waste Move waste up hierarchy, maximise by-product and energy recovery, manage residues per CSW 2. • Policy DM 3 Ecological Impact Assessment Achieve net biodiversity gain (≥10% for major developments). Include Biodiversity Gain Plan showing implementation, management, and maintenance.

¹⁰ Kent Minerals and Waste Local Plan 2024-39: [Kent Minerals and Waste Local Plan 2024-39 - adopted March 2025](#)

3.3. The Folkestone & Hythe District Council Net Zero Toolkit

The Net Zero Carbon Toolkit is a practical guide developed in partnership with Folkestone & Hythe District Council to help individuals, businesses and communities work towards Net Zero. With future planning policies expected to require more Net Zero standards, the Toolkit explains how to build new low-carbon developments and how to retrofit existing buildings. It supports the Council's Corporate Plan and Low Carbon Action Plan and will help shape future Local Plan policies by providing evidence for stronger climate action.

Net Zero carbon buildings are defined by four core principles that are inter-related. The impact of each one should be considered when measuring Net Zero performance. The principles are:

- **Energy Efficiency:** Buildings should use energy efficiently for heating, cooling, lighting, and equipment to reduce costs, carbon emissions, and strain on energy networks.
- **Low Carbon Heating:** New buildings must use low carbon heating/cooling from the start and avoid gas connections to support Net Zero goals.
- **Renewable Energy:** Renewable energy generation, like solar panels, should match or exceed a building's annual energy use to qualify as Net Zero.
- **Embodied Carbon:** Buildings should minimise the carbon footprint of their materials, not just operational energy use.

In addition, the wider sustainability context must be considered. A successful development integrates with its surroundings, influencing ecology, social value, health, wellbeing, and water management. Design and layout decisions have far-reaching impacts on achieving Net Zero Carbon, supporting local communities, enhancing biodiversity, and meeting broader sustainability goals.

Folkestone & Hythe's carbon budget starting from 2020, is 3.1 MtCO₂. Current emissions are approximately 0.47 MtCO₂ per year, meaning the remaining budget will be exhausted in just 3.5 years if no further reductions are made. This highlights the urgent need to reduce carbon emissions.

Achieving Net Zero carbon in both design and operation requires that a project's brief and performance targets explicitly set this ambition from the outset. While the Proposed Development is not targeting Net Zero, the design has been informed by the principles and KPIs within the Net Zero Toolkit (see Table 7 below). These indicators guide decision-making and support improvements in energy performance, embodied carbon, and long-term operational efficiency. This approach aims to move the scheme as close as practicable to the aspirations outlined in the Net Zero Toolkit, while also ensuring it remains economically viable and affordable for future occupants.

Table 7 Key Performance Indicators | New Buildings

	KPIs New apartments	KPIs New commercial
Energy demand	Space heating demand 15 kWh/m ² /yr or a heating load of 10 W/m ²	
Energy consumption	Energy Use Intensity	
	35 kWh/m ² /yr	70* kWh/m ² /yr
Renewable energy	Electricity generation 120 kWh/m ² fp/yr (m ² fp:m ² building footprint)	
Embodied carbon	Upfront carbon good practice benchmark	
	500 kgCO ₂ e/m ² /yr	600 kgCO ₂ e/m ² /yr
Water consumption	95 litres/person/day	10 litres/person/day

4. Sustainability Key Objectives

This Sustainability Statement demonstrates how the Proposed Development at Hythe Imperial Gardens aligns with national and local sustainability policies and climate objectives. While the project is not formally targeting Net Zero, the Key Performance Indicators (KPIs) have been considered in the design of the development, with an aim to prioritise sustainability, and drive sustainability principles within the development. The site-wide sustainability strategy as discussed in this report serves as a guide progressing towards these KPIs across energy efficiency and broader sustainability measures.

The Proposed Development follows the core sustainability principles set out in the Folkestone & Hythe District Council Net Zero Toolkit, adopting a fabric-first approach. The design carefully integrates energy efficiency, low-carbon solutions, and wider sustainability strategies, achieving performance that exceeds current policy standards.

It aims to integrate core sustainability principles, as outlined in the following sections:

- **Route to Net Zero:** how the Proposed Development follows the four core principles; energy efficiency, low-carbon heating, on-site renewable energy generation, and embodied carbon.
- **Site Wide Sustainability:** how the Proposed Development follows the core principles of site wide sustainability including site appraisal and layout design, climate change resilience, water, sustainable transport, blue and green infrastructure, and community.
- **Beyond Net Zero - BREEAM:** the non-residential buildings are targeting BREEAM 'Excellent' rating under the BREEAM UK New Construction (NC) Version 6.1 (V6.1).

5. Route to Net Zero

The Proposed Development has sought to align with the Folkestone & Hythe District Council Net Zero Toolkit. The development has undertaken this by considering the four core principles, alongside an understanding for the technical and economical feasibility of the development. Net Zero carbon buildings performance measurements should consider the following inter-related four core principles as shown in the Figure 4:

1. Energy Efficiency
2. Low Carbon Heating
3. Renewable Energy Generation
4. Embodied Carbon

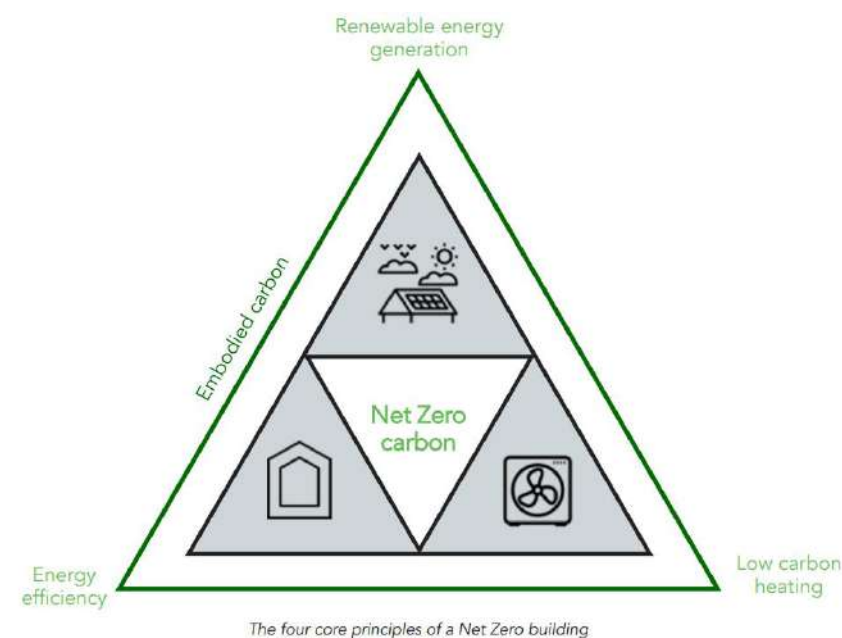


Figure 4 Folkestone & Hythe District Council Net Zero Toolkit: The four core principles of a net zero building

To work towards the Net Zero target, strategies for both operational energy and embodied carbon should be established. The operational energy approach should set out an energy strategy that incorporates energy efficiency, low-carbon heating, and renewable energy generation. It should also include key design and construction principles that help reduce embodied carbon emissions, such as applying circular economy principles.

5.1. Energy Strategy



Folkestone & Hythe District Council Core Strategy Review (2022) Policy SS8

'The energy strategy shall demonstrate how the development takes a fabric-first approach, makes the maximum use of passive solar gain, as well as energy generation from the latest technologies in and on buildings and structures. All community buildings shall seek to meet zero carbon standards as exemplars, with an aspiration for the development to achieve carbon neutrality.'

Folkestone & Hythe District Council Place and Policies Local Plan (2020) Policy CC1

'All major new-build housing developments and new non-residential buildings of 1,000 sqm or more gross floorspace must achieve at least a 10% reduction in carbon emissions above the Target Emission Rate, using on-site renewable or low-carbon energy technologies.'

5.1.1. Energy Hierarchy

The energy strategy for the Proposed Development (including both outline and full elements) is set out in accordance with the Energy Hierarchy as shown in Figure 5. This Energy Hierarchy adopts the three of four core principles as outlined in the Folkestone & Hythe District Council Net Zero Toolkit.

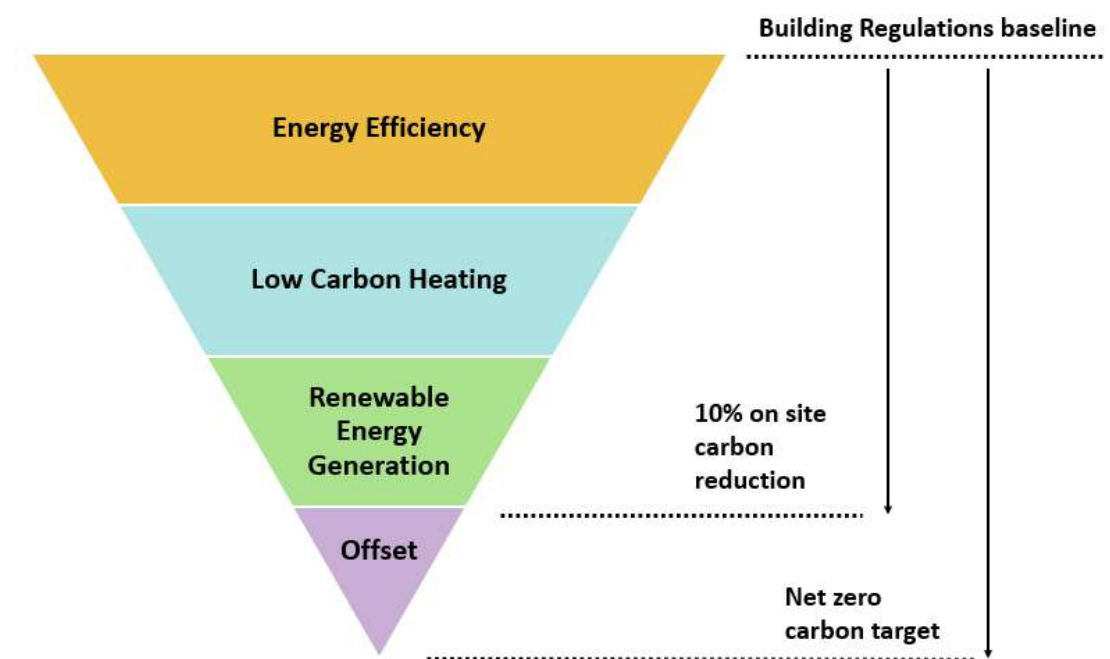


Figure 5 Energy hierarchy design approach for the Proposed Development

The strategy complies with the requirements set out in Part L 2021 of the Building Regulations. Under Part L 2021, the energy performance of new buildings is assessed through emissions metrics, including the Building Emissions Rate (BER), which reflects the actual calculated CO₂ emissions of a building based on its design, specification, and energy use. The Target Emission Rate (TER) represents the maximum allowable CO₂ emissions for a building of the same size and type, set by the regulations to ensure minimum energy efficiency standards.

For the non-residential elements submitted in full detail, full energy modelling has been undertaken to demonstrate performance against the relevant local and national standards, supported by the principles of the Energy Hierarchy.

Full energy modelling has been undertaken demonstrating:

- **Energy Efficiency:** Buildings consume energy for heating, cooling, hot water, ventilation, lighting, and equipment. Improving efficiency reduces operating costs, carbon emissions, and pressure on the wider energy network.
- **Low Carbon Heating:** Low-carbon heating and cooling are essential for Net Zero buildings. All new buildings should operate with low-carbon systems from the outset and must not connect to the gas network.
- **Renewable energy generation:** on-site renewable generation such as solar PV should be proposed on site. The design provides on-site renewable and low-carbon technologies achieving at least a 10% carbon reduction beyond the Target Emission Rate, in line with Policy CC1 of the Folkestone & Hythe District Council Places and Policies Local Plan (2020).

For the residential elements submitted in outline, the development will follow the overarching principles of the Energy Hierarchy; detailed energy modelling will be undertaken at a later stage, once the design has advanced.

The Proposed Development will be fully electric with no gas provision. It will incorporate heat-pump technologies along with photovoltaic panels to maximise on-site renewable energy.

The above approach ensures a robust, best-practice-aligned energy strategy that reduces operational carbon emissions through improved building fabric, efficient services, and the targeted use of low-carbon and renewable technologies.

Limitations

The appraisals in this strategy are based on policy targets and serve as an umbrella framework for energy performance reduction and will not be understood as a predictive assessment of likely future energy requirements or otherwise.

Occupants may operate their systems differently, and / or the weather may be different from the assumptions made by Part L approved calculation methods, leading to differing energy requirements.

The data provided in this statement is to illustrate the potential for the outline application, subject to refinement once details on the final development mix and form are available.

5.2. Energy Efficiency

5.2.1. Passive Design

Passive design and energy-efficiency measures lower overall energy demand and associated CO₂ emissions. A form-and-fabric-first approach considers building orientation, layout, and high-performance envelopes (e.g., low U-values, good airtightness, and efficient glazing) to reduce heat loss in winter and maintain cooling in summer. Prioritising demand reduction cuts operational costs and carbon emissions in a reliable, low-maintenance way, without relying on additional plant or future replacements.

Table 8 below summarises the key measures proposed for the Proposed Development.

Table 8 Passive Design Strategies

Measure	Description
 Building Orientation	Residential: South-facing façades will maximise glazing to ensure good daylight access and passive solar gain at a later stage, while also providing suitable roof conditions for installing renewable energy systems. Non-residential: South-facing façades have incorporated external shading elements (e.g., deep balconies, fins) to block high-angle summer sun while allowing low-angle winter sunlight for passive heating. Roofs have also been designed to accommodate renewable energy systems.
 Natural Ventilation	Residential: Natural ventilation will be proposed. Minimised floor plate depths, along with the size and location of openings, will facilitate airflow and contribute to effective natural ventilation. Non-residential: Natural ventilation with openable windows and extract fans in the en-suite bathroom has been proposed

Measure	Description
	for the hotel rooms located in the extension, which are also included in the full energy modelling.
 Improved Thermal Insulation and Good Fabric Performance	Residential: U-values proposed go beyond current building regulations and look to align with Future Homes Standard targets where feasible. Non-residential: U-values are proposed to go beyond Part L 2021 requirements and have been included in the full energy modelling.
 Improved Fabric Air Permeability	Residential: The development goes beyond building regulations targeting to achieve 3 m³/(h·m²) at 50 Pa. Non-residential: Proposed 3 m³/(h·m²) at 50 Pa, which has been included in the full energy modelling.
 External Shading	Residential: Residential units will be designed in accordance with Part O considering current and consideration for future weather files, with shading incorporated where required. Non-residential: External shading elements (e.g., deep balconies, fins) have been proposed in the design and incorporated into the full energy modelling.
 Good Solar Design: Natural Daylighting	Glazing of suitable size has been proposed for both residential and non-residential elements to enhance occupant health and wellbeing, while reducing energy use and associated CO₂ emissions through a passive daylighting strategy.

By taking a fabric-first approach, the Proposed Development will reduce energy demand through passive means, providing a reliable and long-lasting alternative to technology-led

solutions. The scheme aims to support a pathway to net zero, with U-values designed to go beyond Part L 2021 requirements and align with Future Homes Standard targets, while working toward the targets in the Folkestone & Hythe District Council Net Zero Toolkit. Fabric performance standards are summarised in Table 9 for residential and Table 10 for non-residential buildings.

Table 9: Fabric performance Building Regulations and Best Practice Guidance suggested by the Folkestone & Hythe District Council Net Zero Toolkit – residential

Building Element	Building Regulations	Best Practice (Optional)	
	Part L 2021 Limiting U-values (minimum compliance) (W/m².K)	Future Homes Standard (2023 consultation) (W/m².K)	The Folkestone & Hythe District Council Net Zero Toolkit (W/m².K)
External wall	0.26	0.18	0.09
Roof	0.16	0.11	Small Housing - 0.09 Flats - 0.10
Floor	0.18	0.13	0.09
Window	1.60	1.20	0.80
Air Permeability	≤ 8 m³/(h·m²) at 50 Pa	≤ 5 m³/(h·m²) at 50 Pa	≤ 1m³/(h·m²) at 50 Pa

Table 10 Fabric performance Building Regulations and Best Practice Guidance suggested by the Folkestone & Hythe District Council Net Zero Toolkit – non-residential

Building Element	Building Regulations	Best Practice (Optional)
	Part L 2021 Limiting U-values (minimum compliance) (W/m².K)	The Folkestone & Hythe District Council Net Zero Toolkit (W/m².K)
External wall	0.26	0.09
Roof	0.18	0.10
Floor	0.18	0.09

Building Element	Building Regulations	Best Practice (Optional)
	Part L 2021 Limiting U-values (minimum compliance) (W/m ² .K)	The Folkestone & Hythe District Council Net Zero Toolkit (W/m ² .K)
Window	1.60	0.80
Air Permeability	≤ 8 m ³ /(h·m ²) at 50 Pa	≤ 1m ³ /(h·m ²) at 50 Pa

Table 11 below shows the proposed building fabric performance for the Proposed Development.

Table 11: Proposed Building Fabric Performance

Building Element	Proposed Targets (W/m ² .K)	
	Residential	Non - residential
External wall	0.18	0.18
Roof	0.11	0.15
Floor	0.13	0.15
Window	1.20	Hotel and Spa Extension and Leisure Building: 1.20 Golf Building: 1.14
Air Permeability m ³ /m ² .hr@50Pa	≤ 3 m ³ /(h·m ²) at 50 Pa	≤ 3 m ³ /(h·m ²) at 50 Pa

Table 12 below shows the proposed glazing performance for the Proposed Development.

Table 12 Proposed Glazing Performance

Glass Performance	SAP 10.2 Reference values (residential)	Part L 2021 Notional (non - residential)	Proposed performance	
			Residential	Non - residential
Light transmission	0.8	0.6 (side-lit)	0.8	0.6
Solar transmittance (g-value)	0.63	0.29 (side-lit)	0.63	0.29

Note: As the Future Homes Standard has not yet been adopted, the proposed glazing performance for the residential elements submitted in outline has referred to the SAP 10.2 reference values. The project is committed to following the finalised requirements in the formally adopted version once it becomes available.

5.2.2. Active Design

The Proposed Development will feature highly efficient building services exceeding Part L 2021 minimum standards:

- All-electric systems and appliances
- LED lighting throughout
- Visible metering
- Minimal cooling in line with Passivhaus standards
- Prioritised natural ventilation

Smart energy systems and controls will optimise heating, cooling and domestic hot water for both residential and non-residential buildings. Programmable timers, weather and load compensation, and adaptive or learning thermostats will enhance efficiency, tailored to occupancy patterns and refined during design development.

High-efficiency plant and equipment will minimise energy use while maintaining optimal indoor conditions. Performance was validated and improved using dynamic thermal modelling to benchmark predicted CO₂ reductions. Measures include high-efficiency artificial lighting with specified light power densities and controls.

For the non-residential elements submitted in full detail, the following high-efficiency artificial lighting measures as outlined in Table 13 have been proposed in the full energy modelling.

Table 13 Proposed lighting performance – non-residential

Use		Efficacy (lumens/ circuit Watt)	Illuminance (lux)	Auto presence detection	Daylight control
Spa and Hotel Extension	Treatment Room	110	300	None	Manual daylight control
	Relaxation Room	110	300	None	Manual daylight control
	Nail Bar	110	300	None	None
	Hotel Room	110	100	Auto on/off (room card)	None
Leisure Building	Swimming Pool	110	300	None	Photocell control dimming
	Gym	110	300	Auto on/off	Photocell control dimming
	Studio	110	300	None	Photocell control dimming
General	Corridor	110	100	Auto on/off	None
	Reception / Shop	110	300	None	Photocell control dimming
	Office / PT Room	110	300	None	None

Use		Efficacy (lumens/ circuit Watt)	Illuminance (lux)	Auto presence detection	Daylight control
	WC	110	200	Auto on/off	None
	Changing Room	110	100	Auto on/off	None
	Store	110	100	Auto on/off	None
	Plant	110	200	None	None

Use		Gain (W/m ²)	Illuminance (lux)	Auto presence detection	Daylight control
Golf Building	Golf Simulator	4.5	300	Auto on/off	Photocell control dimming
	Bar	4.5	200	Auto on/off	None
	Kitchen	4.5	500	Auto on/off	None
General	Corridor	4.5	100	Auto on/off	None
	Reception	4.5	300	Auto on/off	Photocell control dimming

Use		Gain (W/m ²)	Illuminance (lux)	Auto presence detection	Daylight control
	WC	4.5	200	Auto on/off	None
	Changing Room	4.5	100	Auto on/off	None
	Store	4.5	100	Auto on/off	None

The efficiency performance of mechanical system has been carefully assessed and selected to exceed Part L: 2021 minimum compliance requirements, as detailed below. They have been proposed in the full energy modelling.

Table 14 Proposed mechanical system efficiencies – non- residential

Use		System	Heating Source SCOP	Cooling Source SEER	DHW	Heat Recovery Efficiency	Ventilation Plant SFP (W/l/s)
Spa and Hotel Extension	Hotel rooms	VRF	SCOP = 4.2	SEER = 6	COP = 3.2	N/A (natural ventilation)	0.5 (extract only)
	Changing room	VRV (R32)	SCOP = 4.2	SEER = 6	COP = 3.2	70% (AHU with plate heat exchanger)	1.7
	SPA	VRV (R32)	SCOP = 4.2	SEER = 6	COP = 3.2	70% (AHU with plate heat exchanger)	1.7
Leisure Building	Changing room & Reception	VRF	SCOP = 4.2	SEER = 6	COP = 3.2	70%	1.7

Use		System	Heating Source SCOP	Cooling Source SEER	DHW	Heat Recovery Efficiency	Ventilation Plant SFP (W/l/s)
						(AHU with plate heat exchanger)	
	Fitness	VRF	SCOP = 4.2	SEER = 6	COP = 3.2	70% (AHU with plate heat exchanger)	1.7
	Main space	VRV (R32)	SCOP = 4.2	SEER = 6	COP = 3.2	85% (MVHR)	1.7
Golf Building	Changing room	Electric panel heater	1	/	COP = 3.2	70% (AHU with plate heat exchanger)	1.5
	WC / Shower	Electric panel heater	1	/	COP = 3.2	N/A (local extract fans)	0.5
	Kitchen	VRV (R32)	SCOP = 4.2	SEER = 6	COP = 3.2	N/A (Kitchen extract system)	0.6

For the residential elements submitted in outline, the scheme commits to the following high-efficiency artificial lighting measures (based on SAP 10.2 reference values):

- Fixed lighting capacity (lm) = 185 x TFA
- Efficacy of all fixed lighting = 80 lm/W

The scheme commits to the following mechanical system efficiency performance (based on SAP 10.2 reference values):

- Natural ventilation with intermittent extract fans
- Prioritised use of heat pumps for space heating and domestic hot water provision.

The project is committed to following the finalised requirements in the formally adopted version once it becomes available.

Further to the above specifications:

- A power factor correction (> 0.95) will be included to improve the electric stability and efficiency of the transmission network.
- Smart meters are planned for the development to enable a demand-led response, which makes it possible to save energy by turning off non-essential equipment or running equipment at lower capacities at times of peak demand.
- Fan controls: Zones with supply and extract ventilation will benefit from demand control as a function of the occupancy density.

In addition, a Building User Guide will be handed over to tenants and will contain recommendations on how to reduce unregulated energy consumption through the procurement of energy efficient equipment.

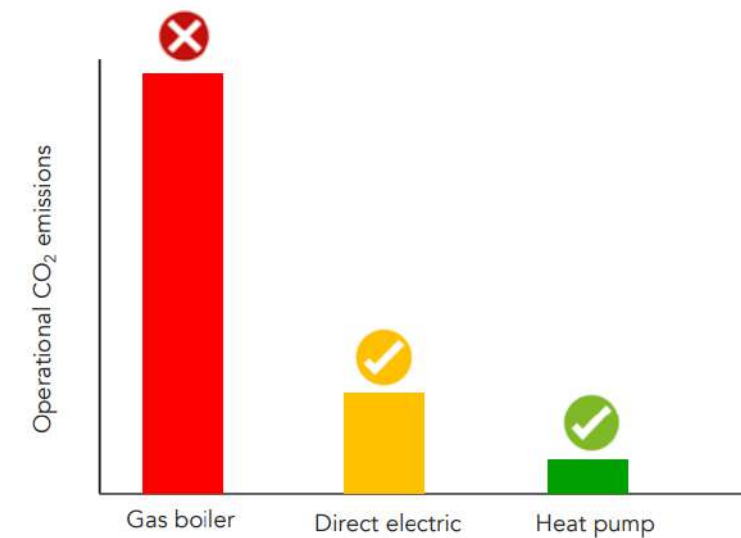
5.3. Site Wide Strategy

5.3.1. Low Carbon Heating

There are no existing or planned heat networks near the Proposed Development. The scheme has been designed to operate independently with an efficient on-site energy solution.

As shown in Figure 6 and advised in the Folkestone & Hythe District Council Net Zero Toolkit, heating system choice strongly affects operational CO₂ emissions. Electric systems, including heat pumps, produce significantly lower emissions than gas boilers.

Net Zero buildings should avoid fossil fuels, with electricity supplied from on-site renewables and an increasingly decarbonised grid.



Options for heat - the choice of system will affect operational CO₂ emissions over a long time. Electric forms of heating (direct electric and heat pumps) will emit a fraction of a gas boiler's carbon emissions (averaged over 2022-2050).

Figure 6 Folkestone & Hythe District Council Net Zero Toolkit: CO₂ emissions of different heating systems

Heat pumps transfer heat efficiently using air, ground, or water, providing space heating, cooling, and hot water for individual or communal systems. Air Source Heat Pumps (ASHP) typically achieve 250~300% efficiency, while direct electric systems are 100% efficient but can be costly unless off-peak electricity is used.

Hydrogen for heating systems remains immature, high-carbon, and is prioritised for harder-to-decarbonise sectors.

The Proposed Development have considered the following low carbon solutions as outlined in Table 15 below:

Table 15 Summary of Potential Low Carbon Technologies

Measure	Description	Proposed?	
		Residential	Non-residential
 Ground/Water Source Heat Pump	GSHP have been considered too costly for the project and are not technically viable at this stage. The use of water source heat pumps is still possible but will be developed at the next stage. Although currently ASHP are the preferred option.	No	No
 Air Source Heat Pump	Air Source Heat Pumps with thermal stores proposed for heating (and cooling) Air source heat pumps (ASHP) work to extract heat from the air at efficiencies of 400% and more.	Feasibility to be explored	Yes – has included in the full energy modelling
 Hydrogen Energy	No tidal energy sources nearby to the site, tidal energy will not be explored further on the project.	No	No

5.3.2. Renewable Energy Generation

The Proposed Development has considered the renewable technologies as outlined in Table 16 below. The developer is committed to maximising on-site renewable energy. The scheme aims to achieve a minimum 10% reduction in carbon emissions above the Target Emission Rate, using on-site renewable or low-carbon energy technologies, which is in line with the Folkestone & Hythe District Council’s Places and Policies Local Plan (2020), Policy CC1.

Table 16: Summary of Potential Renewable Technologies

Measure	Description	Proposed?	
		Residential	Non-residential
 Photovoltaics	Photovoltaic panels can be used to generate renewable electricity from the sun. This energy can be exported back to the National Grid or directly used on site. Available space on roof will be utilised.	Yes	Yes – has included in the full energy modelling
 Solar Thermal	The free roof area is being used for PV panels, as heat pumps are supporting the heat loads. Therefore, solar thermal is not considered feasible at this stage.	No	No
 Bio-fuelled Heating	Unviable due to local air quality requirements, fuel delivery and storage.	No	No
 Electric Vehicle Charging (EVCP)	Vehicle and cycle parking will be provided at a level that is compliant with the applicable KCC standards. Electric Vehicle (EV) charging infrastructure will also be provided in line with the Building Regulations Part S.	Yes	Yes

Measure	Description	Proposed?	
		Residential	Non-residential
 Wind Power	There is considerable evidence of urban wind turbines failing to perform to manufacturer's output estimates. Significant planning and integration issues also exist and consequently wind turbines are not viable.	No	No

5.4. Energy results for non-residential

Table 17 below outlines the energy efficiency and Low Carbon Heating (ASHP) improvements achieved over the Building Regulations baseline for the non-residential elements, including Spa and Hotel Extension, Leisure Building and Golf Building, which are submitted in full detail as part of this hybrid planning application.

Table 17 Energy Efficiency and Low Carbon Heating Improvements over Building Regulations Baseline: Non-Residential Elements

	Part L 2021 Target Emission Rate (TER) - Notional kg CO2/m².annum	Part L 2021 Building Emission Rate (BER) - Proposed	% Improvement
Non-residential elements (Spa and Hotel Extension, Leisure Building, Golf Building)	16.90	16.72	1.06%

Relevant BRUKLs are included in Appendix D.

Table 18 below outlines the improvements achieved with on-site renewable technologies (PV) over the Building Regulations baseline for the non-residential elements, including the Spa and Hotel Extension, Leisure Building, and Golf Building, which are submitted in full detail as part of this hybrid planning application.

Table 18 Improvements achieved with on-site renewable technologies (PVs) over Building Regulations Baseline: Non-Residential Elements

	Part L 2021 Target Emission Rate (TER) - Notional kg CO2/m².annum	Part L 2021 Building Emission Rate (BER) - Proposed	% Improvement
Non-residential elements (Spa and Hotel Extension, Leisure Building, Golf Building)	16.90	14.92	11.70%

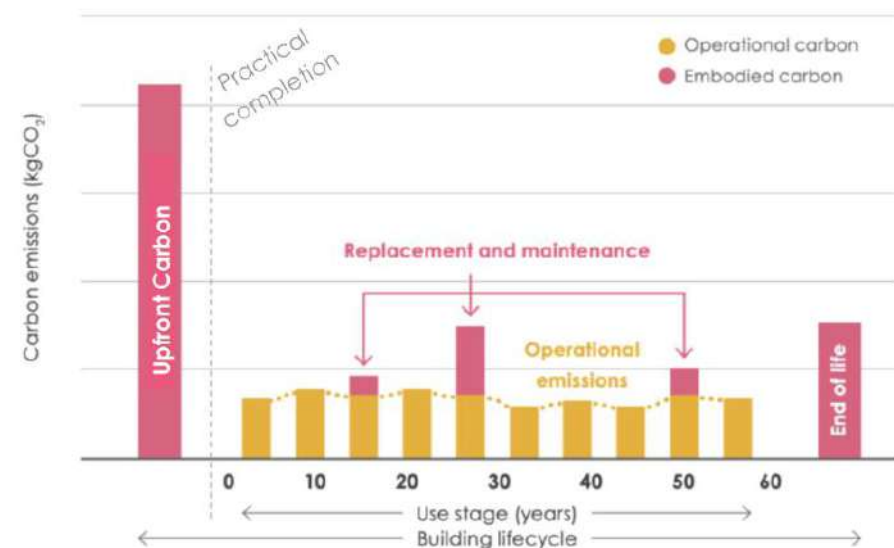
Relevant BRUKLs are included in Appendix E.

5.5. Embodied Carbon

Reducing a building's lifetime emissions requires addressing both operational and embodied carbon. Embodied carbon encompasses all greenhouse gas emissions associated with a building's production, construction, maintenance, and end-of-life stages.

Upfront carbon, from manufacturing, transport, and construction, typically represents the largest portion and should be considered from the earliest design stage. In-use carbon arises from repair, maintenance, and component replacement, while end-of-life carbon results from deconstruction, material removal, and processing. As operational energy efficiency improves, embodied carbon becomes an increasingly significant part of a building's total carbon footprint.

Effective strategies include optimising structural design, specifying durable materials to extend longevity, and designing for deconstruction to enable reuse and recycling, supporting both carbon reduction and the principles of a circular economy.



Embodied carbon is the carbon emissions associated with the full life cycle of the building: its production, construction, maintenance and end of life stages. In low energy buildings the embodied carbon is a significant proportion of the overall carbon footprint of a building, especially the upfront carbon emitted before practical completion. (Source: LETI Embodied Carbon Primer)

Figure 7 Folkestone & Hythe District Council Net Zero Toolkit: Proportion of the overall carbon footprint of a building

5.5.1. Life Cycle Assessment



For the **non-residential elements submitted in full detail**, a building life cycle assessment has been prepared in line with BREEAM Mat 01 criteria. This assessment helps the project team understand the overall environmental impact of the design, identify major contributors early, and reduce the use of high-carbon materials wherever possible.

An appraisal of significantly different design options was undertaken to evaluate embodied carbon impacts over a 60-year study period and identify opportunities to reduce environmental impacts. This included:

- 4 options for the superstructure
- 4 options for the foundations (substructure)
- 2 options for hard landscaping

Options to reduce embodied carbon may not be adopted due to factors such as higher lifecycle costs, aesthetic preferences for more carbon-intensive materials, structural requirements, longer construction programmes, insurance constraints, or other practical limitations.

The proposed options have followed the following low carbon principles when they made the decision:

- Material efficiency: Preference for rainscreen cladding on SFS (steel frame system) supports modular prefabrication, reuse, and recyclability.
- Green roofs: Warm roof with extensive green roof reduces heat island effect and improves biodiversity.
- Foundation choice: Piled foundations considered for embodied carbon impact and adaptability.
- Hard landscaping: Use of reinforced gravel and natural stone instead of concrete blocks reduces embodied carbon.
- Design flexibility: Options chosen for adaptability and future reuse.

5.5.2. Waste and Circularity



Kent Minerals and Waste Local Plan (2025) Policy CSW 3

"All new developments must be designed in accordance with circular economy principles to:

1. Minimise the production of construction, demolition and excavation waste and manage any such waste arising during the development in accordance with Policy CSW 2;

- 2. retain and repurpose existing structures where possible;
- 3. allow for ease of redevelopment and refurbishment; and,
- 4. For development which has a total floor space of greater than 1000 square metres and / or comprises greater than 10no. units of housing and / or where the site is 1 hectare or more, the above principles (1 to 4) should be demonstrated via the submission of a Circular Economy Statement.'

5.5.2.1. Retrofit first

Reusing and retrofitting existing buildings significantly reduces embodied carbon compared to new construction. In line with the Circular Economy Statement prepared to accompany the hybrid planning application, the structure of the existing hotel (the largest existing building on site) will be predominantly retained with 7,566 m2 of the Hotel floor area will be retained and 1,648 m2 being demolished. The overall retention rate (by floor area) of the project, accounting for all existing buildings located in the site boundaries, is 78%.

Demolition materials will be crushed on-site for reuse as aggregate, while remaining waste will be recycled or repurposed off-site. Careful dismantling will be prioritised to maximise reuse opportunities, including for temporary structures and landscaping materials. Table 19 below set out the strategic approach for existing structure.

Table 19 Circular Design Approaches for existing structure

Strategic Approach		Phase / Building / Area /Layer	Strategic response
Existing Structure	Retain and retrofit	Existing buildings	Of the existing buildings two are begin retained. The golf compound which currently is in use as storage but will be retrofitted to be suitable as a staff accommodation area and welfare facilities.
	Partial Retention and Refurbishment	N/A	Of the existing buildings two are to be retained. The hotel which will be part-retained and extended horizontally with the addition of an east and west wing to support leisure, spa and further hotel use. 82% of the existing hotel GIA will be retained. 78% of all existing buildings (inc. existing golf buildings) will be retained.
	Disassemble and Reuse	Existing buildings	Where possible during demolition materials or elements will be disassembled so that the likelihood of reuse is greater. This should be

Strategic Approach		Phase / Building / Area /Layer	Strategic response
			covered in the pre-demolition audits which will be commissioned at a later design stage.
	Demolish and recycle	Existing buildings	The remaining structures on site will be demolished and the materials reused or recycled. It has been identified that inert material such as concrete can be crushed into aggregate for use on the wider site for back fill or aggregate layers of landscaping constructions.

5.5.2.2. Circularity and waste – design

A Circular Economy Statement has been prepared to accompany the hybrid planning application, addressing Kent’s Waste and Minerals Strategy and the London Plan (March 2022) requirements. The report outlines how the development applies circular economy principles across design, construction, operation, and end-of-life stages, promoting sustainability, resilience, and reduced lifecycle environmental impacts.

As shown in Figure 8, Circular economy keeps materials in use at their highest value for as long as possible, then reuses or recycles them to minimise waste. The ultimate goal is zero residual waste, requiring a shift in how buildings are designed, constructed, and dismantled.

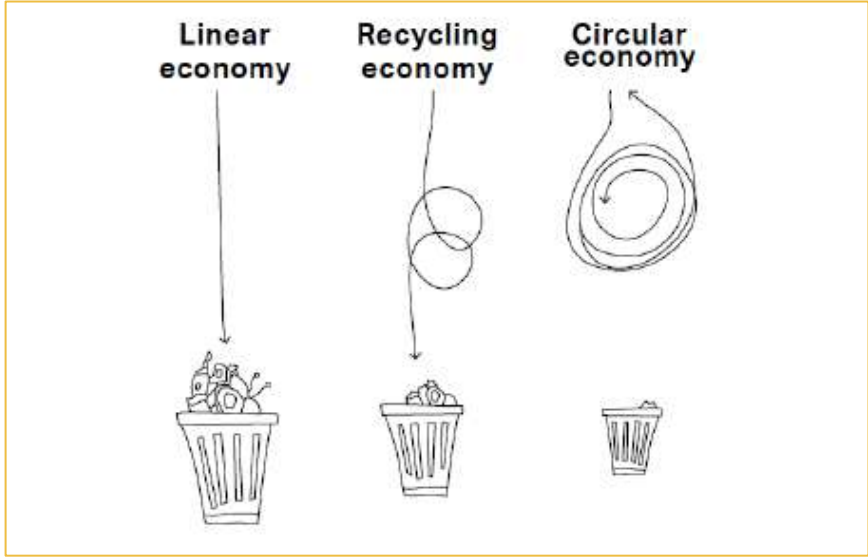


Figure 8 Circular Economy definition - Flanders (GLA circular economy statement guidance March 2022)

Figure 9 below shows the decision tree for new buildings. They both highlight the prioritisation of a design for ‘flexibility’, ‘replaceability’ and ‘adaptability’, as set in the CE hierarchy for building approaches (Figure 10).

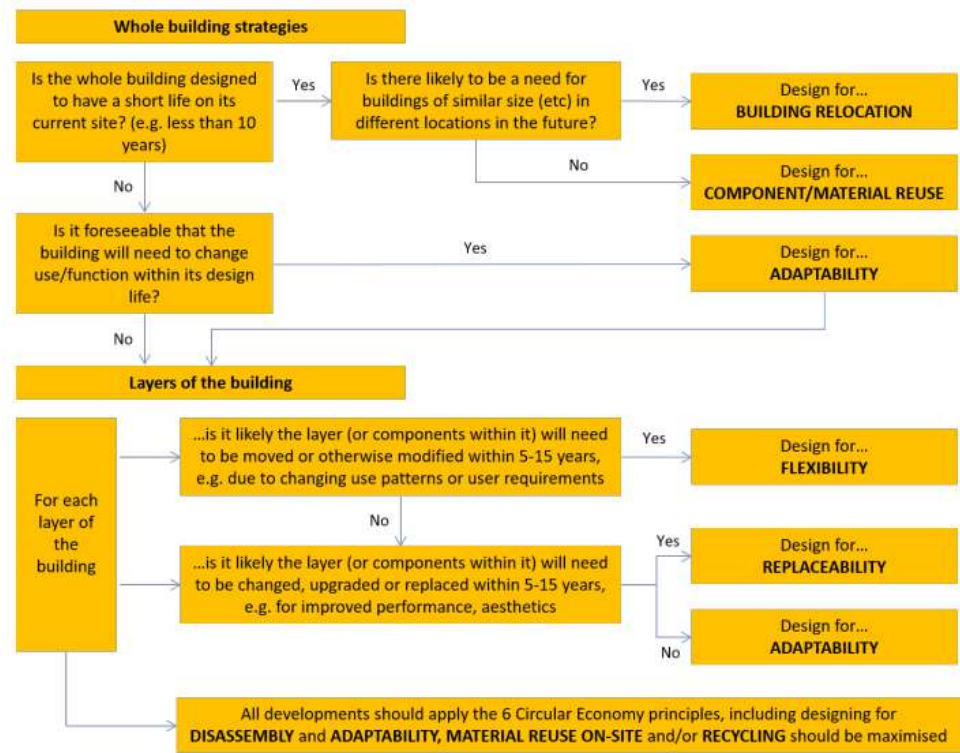


Figure 9 GLA Decision Tree for New Buildings

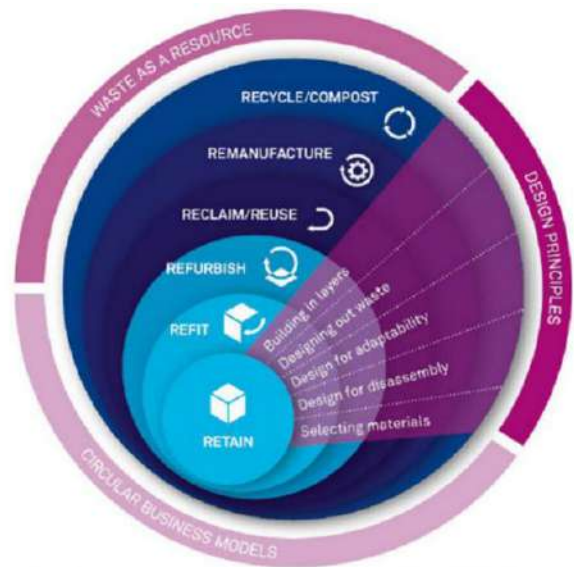


Figure 10 CE Hierarchy for Design Approaches (Source: Building Revolutions- RIBA)

The circular economy strategy for this project is covered in the following strategic commitments:

- 1. Set targets:** Align with BREEAM and GLA waste benchmarks.
- 2. Retain existing structures:** Keep approx. 78% of existing floor area, including most of the hotel.
- 3. Reuse/recycle materials within existing structures:** Carefully dismantle for reuse/recycling on- and off-site, including temporary structures and landscaping.
- 4. Source locally:** Use local materials to cut transport emissions and support the economy.
- 5. Design principles by building layer:** Design out waste, ensure longevity, adaptability, and easy disassembly.
- 6. Recycled content and low embodied carbon materials:** Use recycled/reused materials with low embodied carbon and high recycled content.
- 7. Design for material efficiency:** Optimise material use through modular design, standardization, and avoiding oversizing.

5.5.2.3. Circularity and waste – construction

In addition to the strategy, waste arisings were estimated for excavation, demolition and operational. This was based on industry benchmarks and the areas provided by the consultant team. The following are the total estimated waste arisings:

- Demolition waste: ~ **1,828 tonnes** (91 tonnes to landfill)
- Excavation waste: ~ **6,069 tonnes** (303 tonnes to landfill)
- Construction waste: ~ **4,520 tonnes** (43 tonnes to landfill)

Responsibilities for improving waste performance and monitoring carbon impacts will be assigned to developers and contractors through RMAs and Employer’s Requirements. Contractors will be required to prepare a comprehensive Site Waste Management Plan and appoint dedicated personnel to monitor and track waste on-site. These measures aim to:

- Improve project efficiency
- Enhance understanding of construction impacts and resource use
- Support better resource efficiency for current and future projects

5.5.2.4. BREEAM requirements

In addition, the following BREEAM credits related to the above circular economy principles are targeted in the BREEAM pre-assessments for the non-residential elements submitted in full as part of the planning application. See Section 0, Appendix B and Appendix C for further details.

- **Man 03:** Responsible construction practices – 7 credits
- **Mat 05:** Designing for durability and resilience – 1 credit
- **Mat 06:** Material efficiency – 1 credit
- **Wst 01:** Construction waste management (inc. Pre-demolition audit) – 3 credits
- **Wst 03:** Operational waste – 1 credit
- **Wst 06:** Design for disassembly and adaptability – 2 credits

5.5.3. Sustainable Procurement Approach

The Proposed Scheme has considered sustainable procurement of materials from an early stage. A Sustainable Procurement Plan will be developed and shared with the design team to guide material specification toward sustainable construction products. This plan will include:

- sustainability aims, objectives and strategic targets to guide procurement activities. Note: targets do not need to be achieved for the credit to be awarded but justification must be provided for targets that are not achieved.
- a requirement for assessing the potential to procure construction products locally. There must be a policy to procure construction products locally where possible.
- Include details of procedures in place to check and verify the effective implementation of the sustainable procurement plan.

The scheme will prioritise specifying materials with responsible sourcing certifications (as listed in the BREEAM manual, e.g., BES 6001, EMS) and materials with verified Environmental Product Declarations (EPDs).

This approach promotes the selection of products that minimise environmental, economic, and social impacts across their supply chains, encourages responsible practices in construction product manufacturing and supply, and supports the identification and mitigation of risks. Additionally, it advocates for the use and continual improvement of credible, comparable schemes for evaluating responsible sourcing.

6. Site Wide Sustainability

As defined in the Folkestone & Hythe District Council Net Zero Toolkit, a successful development works well within its wider context, influencing ecology, social value, health, wellbeing, and the water environment. Design decisions impact Net Zero Carbon goals, local communities, biodiversity, and overall sustainability. The relevant principles support holistic, sustainable development are shown in Figure 11 below:



Figure 11 Folkestone & Hythe District Council Net Zero Toolkit: The core principles of site wide sustainability

The Proposed Development adopts a landscape-led approach, optimising building orientation, massing, and road layout to enhance solar access, reduce overshadowing, and improve connectivity. Residential and non-residential façades integrate passive design strategies, renewable energy readiness, and shading for seasonal comfort. The design introduces a crescent form for visual hierarchy, softened architecture, and strong links to green spaces, while road and cycle networks improve permeability and environmental quality.

6.1. Climate Change Resilience



The Proposed Development has incorporated climate change considerations throughout the design, ensuring resilience to risks such as overheating and flooding.

Passive design measures, high-performance glazing and shading (where required) are integrated to minimise overheating risk and maintain thermal comfort. Residential units will be designed in accordance with Part O, using both current and future weather files, with shading included where required. **For the non-residential elements submitted in full detail**, the BREEAM pre-assessments target two credits under Hea 04: Thermal Comfort. Full dynamic thermal modelling will be undertaken at a later stage to demonstrate that the design complies with the criteria set out in CIBSE Guide A Environmental Design, using both current and future weather data.

A detailed Flood Risk Assessment has been completed, and the Sequential Test has been passed. The drainage strategy reduces or maintains runoff rates, ensures post-development runoff volume does not exceed existing levels, retains additional runoff on site through SuDS, and applies a 45% climate change allowance. These measures ensure the development is robust, safe, and adaptable under future climate scenarios.

6.2. Responsible Construction Management



Construction activities pose significant local environmental risks to land, water, and air quality, potentially affecting workers and nearby communities. To mitigate these risks, the scheme commits that the Contractor will manage the site responsibly, prioritising health, safety, and environmental protection.

For the non-residential elements submitted in full detail, the BREEAM pre-assessments target all Man 03: Responsible Construction Practices credits. The scheme commits that the Contractor will:

- Ensure all parties managing the site (e.g., principal and demolition contractors) operate an Environmental Management System (EMS).
- Implement best-practice pollution-prevention measures in line with PPG6 guidelines.
- Meet all requirements in Table 4.1 of BREEAM UK NC V6.1, including vehicle management, pollution control, site tidiness, health and wellbeing, security, training, and monitoring and reporting. Alternatively, the Contractor will register the site under the Considerate Constructors Scheme (CCS) and work towards maximising the available score.
- Appoint a BREEAM AP at construction stage to monitor progress against agreed performance targets, identify risks and opportunities, provide feedback, and coordinate BREEAM evidence.
- Develop a Bill of Materials (BoM) at the next design stage to support the Circular Economy Strategy, setting and tracking targets for material efficiency, reuse and recycled content. Contractors involved in demolition, enabling works and

construction will be required to demonstrate how they will minimise and monitor waste, with circular-economy obligations integrated into tender and contract documents.

6.3. Water Use



Folkestone & Hythe District Council Core Strategy Review (2022) Policy SS8

'All new build housing shall be built to water efficiency standards that exceed the current building regulations so as to achieve a maximum use of 110 litres per person per day of potable water (including external water use).'

'For non-residential development, development shall achieve BREEAM 'excellent' standard including addressing maximum water efficiencies under the mandatory water credits.'

Water management plan and reuse systems to reduce reliance on potable water. Options for rainwater harvesting and attenuating storm water have been explored. BREEAM pre-assessments for the non-residential elements submitted in full detail, are currently targeting all available credits within the Water category. See Section 0, Appendix B and Appendix C for further details.

A comprehensive water-saving strategy includes installing utility meters with pulse outputs and sub-meters for high-use areas, along with smart metering systems for major leak detection. Water conservation will be further explored in later stages through measures such as low-flow taps and showers and ultra-low flush toilets to reduce demand. Adequate irrigation systems will also be proposed at a later stage such as including drip lines, fully subsurface installation, separate zoning, and moisture sensors.

6.4. Sustainable transport



The transport design for the Proposed Development prioritises sustainable access and supports the scheme's wider environmental objectives.

For the **residential elements submitted in outline**, the strategy enhances connectivity across the site through improved pedestrian and cycle links, high-quality public realm integration, and a layout that reduces reliance on private vehicles.

For the **non-residential elements submitted in full detail**, the design includes upgraded footways, dedicated cycle routes, and secure cycle parking to encourage active travel. Access to nearby bus and rail services is strengthened through clear wayfinding and improved arrival points. The parking strategy incorporates active and passive electric vehicle charging infrastructure, alongside well-planned circulation and car-club provision to promote lower-carbon travel choices.

6.5. Blue and green infrastructure

Overall, the transport design delivers a coherent, accessible, and future-ready movement network that supports sustainable mobility and contributes positively to the site's overall environmental performance.

Green and blue infrastructure has been maximised for the Proposed Development, to support biodiversity, enable circular water systems, and reduce flood risk. Planting has been also maximised to improve air quality, lowers temperatures, and enhances overall wellbeing.

For the **residential elements submitted in outline**, the Green and Blue Infrastructure Parameter Plan (Figure 12) defines the minimum green and maximum blue infrastructure within the outline area. This includes green corridors along primary and secondary routes and a crescent-shaped zone between open space and built development. Blue infrastructure will incorporate Sustainable Urban Drainage Systems (SuDS) within green areas.

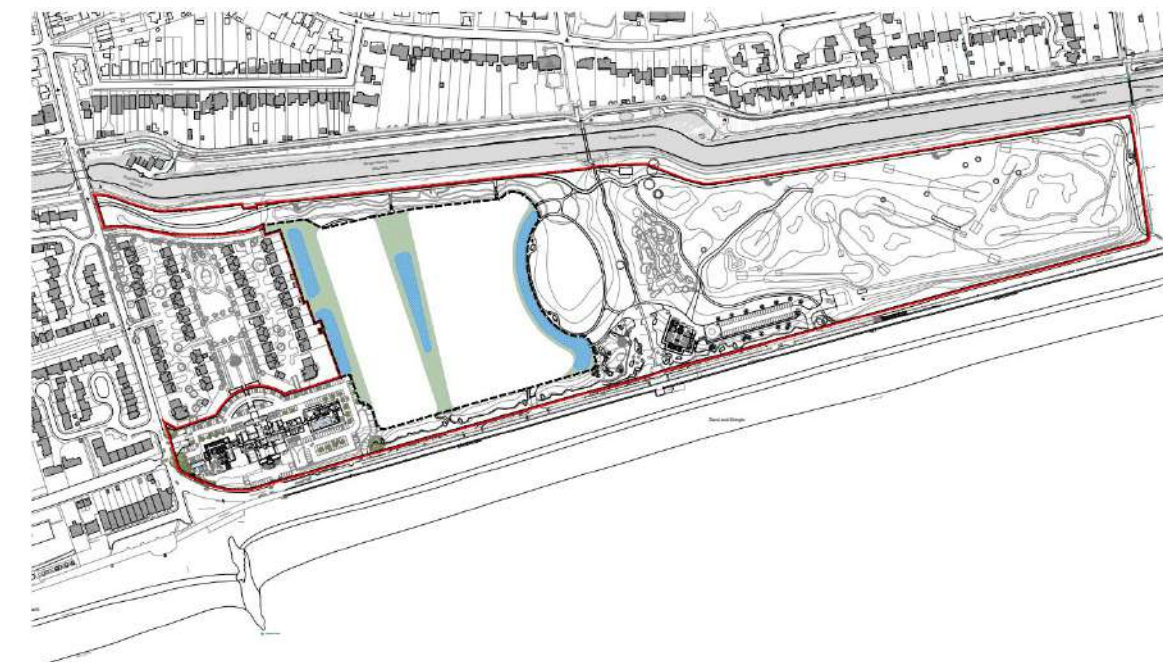


Figure 12 Green and Blue Infrastructure Plan (25.0035.400.04)

For the **non-residential elements submitted in full detail**, the detailed Landscape Masterplan (Figure 13) includes planting, blue infrastructure, and pedestrian/cycle links to enhance accessibility, create habitats, and visually integrate the development.

Key measures include:

- Heritage Trail and cycle path with seating and information boards.

- Retention and management of the RMC embankment vegetation.
- Reedbeds, swales, wetlands, and grassland habitats for biodiversity and water management.
- Woodland buffer along the western edge and shingle areas reflecting coastal character.
- Central Plaza and a new public park as a public gateway and connection to the seafront.
- Widened public promenade along the southern boundary for an active waterfront.



Figure 13 Landscape Masterplan (40255441.1)

6.5.1. Flood Risk and Sustainable Drainage



A Flood Risk Assessment (FRA) has been undertaken for the Proposed Development to ensure compliance with NPPF and relevant local policy. The site lies within Flood Zones 1, 2, and 3, and as the proposals include residential units (classified as “more vulnerable”), a Sequential Test was required and passed. The FRA focuses on managing flood risk from all sources and satisfying Part B of the Exception Test.

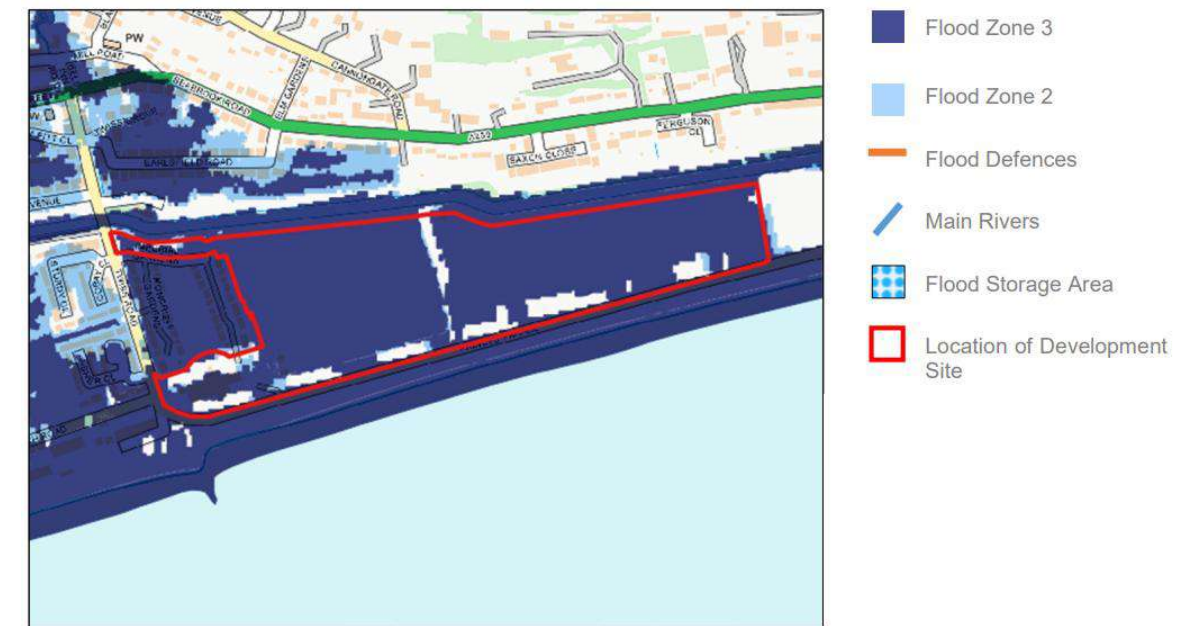


Figure 14 EA's 'Flood Map for Planning' (© Environment Agency, mapping contains Ordnance Survey Data © Crown copyright and database right 2025).

Key findings and mitigation measures are outlined below:

- Primary risk: Coastal flooding, limited to wave overtopping affecting a small area of the existing hotel and golf course.
- Mitigation strategy:
 - Tertiary flood defence wall along the southern boundary (7.50m AODN).
 - Ground floor allocated to less vulnerable uses; residential accommodation located on upper floors.
 - Raised land and finished floor levels for all new elements (e.g., residential at 4.65m AODN).
 - Incorporation of flood resistance and resilience measures.
 - Flood Warning and Evacuation Plan supported by EA's Flood line service.

Surface water runoff will be managed sustainably through infiltration-based SuDS, including water butts, green/blue roofs, permeable surfaces, infiltration basins, and soakaways. These measures will filter and absorb runoff, preventing increased flood risk elsewhere. Foul water will connect to the existing public sewer network.

The Proposed Development can be delivered safely without increasing flood risk to surrounding areas. The recommended measures ensure compliance with NPPF and satisfy Part B of the Exception Test.

In addition, **for the non-residential elements submitted in full detail**, BREEAM pre-assessments currently target 4 credits under Pol 03: Flood and Surface Water Management. The proposed SuDS strategy meets relevant BREEAM Pol 03 criteria, making 4 credits achievable.

See Section 0, Appendix B and Appendix C for further details.

6.5.2. Urban Greening and Biodiversity



A series of ecological surveys including PEA and targeted species surveys confirmed that most of the 17.3 ha site supports habitats of negligible ecological value, with only common toad, breeding birds (local importance) and bat foraging along the Royal Military Canal (county importance) noted as key features. No significant badger or riparian mammal activity was recorded.

The Proposed Development incorporates a range of measures to support urban greening and enhance biodiversity. The landscape design includes green and blue infrastructure, such as the creation of new habitats and Sustainable Urban Drainage Systems (SuDS), which will improve habitat connectivity, support local wildlife, and manage water quality. The Proposed Development also features sensitive lighting design to minimise disturbance to nocturnal species, particularly bats, and provides accessible green spaces to reduce visitor pressure on nearby sensitive sites. These measures are expected to deliver neutral or minor beneficial effects for biodiversity, with ongoing habitat maintenance and monitoring secured by planning condition to ensure long-term ecological value.

In addition, **for the non-residential elements submitted in full detail**, BREEAM pre-assessments currently target 10 credits under LE 02 ~ LE 05 Ecology, by:

- Assessing the site's existing ecological value and identifying risks and opportunities for protection and enhancement.
- Minimising negative ecological impacts on the site and surrounding areas.
- Enhancing ecological value in line with local, regional, and national priorities - the Proposed Development is expected to deliver a net gain of 11.39 area habitat units (24.18% uplift) and an additional 0.99 linear hedgerow units, representing a 236.07% increase.
- Securing long-term monitoring, management, and maintenance of habitats and ecological features.

See Section 0, Appendix B and Appendix C for further details.

6.6. Community



The Proposed Development delivers a highly walkable environment through enhanced pedestrian and cycle routes linking the site with the seafront, Royal Military Canal, and Hythe town centre. Daily amenities and leisure facilities can be accessed by walking or cycling, reducing car dependency and promoting active travel.

The transport design incorporates high-quality public realm, safe crossing points, widened promenades, and traffic-calming to support comfortable and inclusive movement for all users. Secure cycle parking, EV charging infrastructure, and clear wayfinding further encourage sustainable travel, with good connections to local bus and rail services enabling access to wider urban centres.

The Proposed Development integrates mixed-use elements including residential (with affordable housing), hotel and leisure uses, and commercial spaces, supporting a balanced community and providing local employment. Active ground-floor frontages, spill-out spaces, and new public realm including the Central Plaza, Splash Park, and landscaped areas, promote social interaction, play, sport, and cultural activity. Inclusive design principles, accessible paving, and urban furniture create a legible environment for all age groups and abilities.

Public engagement has shaped the proposals, and the design supports meanwhile uses and community-driven events, helping establish a community hub and cultural focal points within the site.

7. Beyond Net Zero - BREEAM



Folkestone & Hythe District Council Core Strategy Review (2022) Policy SS8

'For non-residential development, development shall achieve BREEAM 'excellent' standard including addressing maximum water efficiencies under the mandatory water credits.'

Hilson Moran BREEAM Assessor and BREEAM AP Bo Yang met with the project team on 20 June 2025, to review the current design and to set out a strategy to achieve the BREEAM UK New Construction (NC) Version 6.1 (V6.1) target rating of 'Excellent' for the following:

- Proposed Spa and Hotel Extension
- Proposed Leisure Building
- Golf Building

Following the BREEAM Workshop and following formal response from BRE on 10 September 2025, the following two BREEAM assessments will be proposed for the above non-residential developments:

- One BREEAM assessment under BREEAM UK New Construction V6.1, Residential Institution (Short Term Stay), Fully Fitted, covering Proposed Spa and Hotel Extension, and the Proposed Leisure Building. Residential Institution (Short Term Stay) is assessed as the primary function, with the gym, spa, and swimming pool (other spaces of the two extensions) included as supporting function, following Guidance Note 10¹¹.
A BREEAM Fully Fitted Pre-Assessment tracker (Residential Institution - Short Term Stay) is included in Appendix B. The targeted score is **78.8%** which equates to an **'Excellent'** rating with all mandatory rating criteria targeted. The credit summary is outlined in Table 20.
- One BREEAM assessment under BREEAM UK New Construction V6.1, Leisure, Fully Fitted, covering the Golf Building.
A BREEAM Fully Fitted Pre-Assessment tracker (Leisure) is included in Appendix C. The targeted score is **78.8%** which equates to an **'Excellent'** rating with all mandatory rating criteria targeted. The credit summary is outlined in Table 21,

Folkestone & Hythe District Council also prioritises water requirements in the BREEAM criteria, which are addressed by the Proposed Development. Both BREEAM pre-

assessments are currently targeting all available credits within the Water category. It is the design team's responsibility to ensure that compliant evidence is provided for all relevant BREEAM criteria, in the format prescribed. This will enable the assessor to submit the evidence for a quality assurance review by the BRE prior to issue of a certificate.

The current predicted BREEAM UK NC V6.1 score:

Targeted: credits that are achievable based on the current design strategy.

Potential: additional credits to take in account which can be achieved by having minor improvements on the current scheme without significant cost impact.

Difficult: credits to be taken in account if required. These may have substantial impact on the project cost. The current targeted score provides enough of a buffer for the difficult credits not to be considered at this time.

Although more than 85% of credits may be technically achievable when adding potential credits, an 'Outstanding' rating is not pursued. This is because one of the minimum requirements for an 'Outstanding' rating, achieving at least 6 credits under Ene 01, is extremely challenging for this scheme. As a result, an 'Excellent' rating remains the realistic and appropriate target for the development.

Table 20 BREEAM UK NC V6.1 credit summary: Spa and Hotel Extension, and Leisure Building

BREEAM UK NC V6.1 credit	Credits Available	Targeted	Potential	Difficult
MANAGEMENT	21	21	0	0
HEALTH & WELLBEING	18	13	2	0
ENERGY	23	13	1	1
TRANSPORT	12	8	4	0
WATER	9	9	0	0
MATERIALS	14	12	1	0
WASTE	10	7	1	0

¹¹ Guidance Note GN10: Assessing mixed-use schemes and developments with multiple buildings or units on the same site, BRE, April 2018.

BREEAM UK NC V6.1 credit	Credits Available	Targeted	Potential	Difficult
LAND USE AND ECOLOGY	13	11	2	0
POLLUTION	12	9	0	2
EXEMPLARY	10	1	1	2
Total	142	104	12	5
Final Weighted Score		78.8%	89.0%	93.0%
Predicted BREEAM Rating		Excellent	Excellent	Excellent

Table 21 BREEAM UK NC V6.1 credit summary: Golf Building

BREEAM UK NC V6.1 credit	Credits Available	Targeted	Potential	Difficult
MANAGEMENT	21	21	0	0
HEALTH & WELLBEING	17	13	2	0
ENERGY	21	11	1	1
TRANSPORT	12	8	4	0
WATER	9	9	0	0
MATERIALS	14	12	1	0
WASTE	10	7	1	0
LAND USE AND ECOLOGY	13	11	2	0
POLLUTION	12	9	0	2
EXEMPLARY	10	1	1	2
Total	139	102	12	5
Final Weighted Score		78.8%	89.2%	93.2%
Predicted BREEAM Rating		Excellent	Excellent	Excellent

8. Conclusion

The Proposed Development adopts a comprehensive, forward-thinking approach to sustainability, fully aligned with national and local policy frameworks. Key strategies include a fabric-first approach to energy efficiency, low-carbon heating through air source heat pumps, and on-site renewable energy generation via photovoltaic panels. The scheme targets at least a 10% reduction in carbon emissions beyond regulatory requirements and aims for BREEAM 'Excellent' ratings for all non-residential buildings.

Circular economy principles drive embodied carbon reduction through retention and reuse of existing structures and materials. Site-wide measures address water efficiency, sustainable transport, biodiversity, and community wellbeing, including blue-green infrastructure for flood risk management and a minimum 10% Biodiversity Net Gain.

Climate resilience and adaptation are embedded throughout the design, supported by ongoing assessments and specialist input. Overall, the development sets a high benchmark for sustainability, delivering long-term environmental, social, and economic benefits while supporting the transition to a net zero, climate-resilient future.

Key sustainability measures are listed below:

- **Energy & Carbon:** A fabric-first design maximises passive solar gain and integrates efficient, modern low-carbon technologies. The non-residential elements achieve an 11.70% reduction in carbon emissions above the Target Emission Rate through on-site renewable and low-carbon energy systems.
- **Embodied Carbon & Circular Economy:** A BREEAM-aligned life cycle assessment has informed material choices and structural options. The project retains 78% of existing structures, promotes reuse and recycling, sources materials locally where possible, and embeds circular-economy principles through a Sustainable Procurement Plan.
- **Climate change resilience:** The scheme integrates passive design, thermal comfort measures and SuDS-led drainage to ensure the development is resilient to future overheating and flood risk.
- **Water Efficiency:** Targets all BREEAM Water credits; options for rainwater harvesting, greywater reuse, SuDS and smart metering.
- **Transport:** Enhanced walking and cycling links, high-quality public realm and EV-ready parking.
- **Flood Risk:** Robust mitigation including defence wall, raised levels, SuDS and compliance with NPPF.
- **Urban Greening and Biodiversity:** The Proposed Development is expected to deliver a net gain of 11.39 area habitat units (24.18% uplift) and an additional 0.99 linear hedgerow units, representing a 236.07% increase.
- **Community:** Walkable, mixed-use neighbourhood with active frontages and inclusive public spaces.
- **BREEAM:** Non-residential buildings targeting BREEAM Excellent.

Appendix A Regulatory & Policy Context

This section outlines the key national, regional, and local regulatory and planning policy context related to sustainability and energy that should be considered by the proposed developments.

1. National Regulation

1.1.1. Climate Change Act 2008

In June 2019, the Climate Change Act (2008) has been amended to mandate that *“the net UK carbon account for the year 2050 is at least 100% lower than 1990 baseline.”*

The Act outlines the requirements and framework to help the UK tackle and respond to climate change, as recommended by the Committee on Climate Change. The carbon budgets, under the Act, are legally binding and intended to act as stepping stones towards the net zero target by 2050.

1.1.2. Net Zero Strategy: Build Back Greener (October 2021)

The Government has set out a strategy, with supporting policies, for the decarbonisation of all sectors of the UK economy to meet the net zero target by 2050. It outlines a 10-point plan for a green industrial revolution laying out the foundations for a green economic recovery from the COVID-19 pandemic and positioning the UK at the forefront of the growing green economy. The key energy policies relevant to this statement include:

- *“By 2035, the UK will be powered entirely by client electricity, subject to security to supply*
- *An ambition that by 2035, no new gas boilers will be sold.*
- *A new £60 million Heat Pump Ready programme that will provide funding for pioneering heat pump technologies and will support the government’s target of 600,000 installations a year by 2028.*
- *Further funding of £620 million for zero emission vehicle grants and EV Infrastructure, including further funding for local EV Infrastructure, with a focus on local on street residential charging.”*

The Net Zero Strategy highly relies on the widespread of low carbon and renewable technologies, such as heat pumps and solar PVs, and their integration with the built environment. The electrification of heating and transportation is key element of this strategy that should be considered in the development proposals brought forward.

1.1.3. National Planning Policy Framework (NPPF) 2024

The National Planning Policy Framework was revised in response to the Proposed reforms to the National Planning Policy Framework and other changes to the Planning system consultation on 12 December 2024 and sets out the government’s planning policies for England and how these are expected to be applied. A minor amendment on 7 February 2025 corrected cross-references and clarified paragraph 155, without altering its policy content.

These policies articulate the Government’s vision of sustainable development, which should be interpreted and applied locally to meet local aspirations. Responding to climate change, conserving, and enhancing the natural environment form important sections of this document.

The NPPF 2024 supports developments that apply a presumption in favour of sustainable development, as per Paragraph 11.

For **plan-making** this means that:

“a) all plans should promote a sustainable pattern of development that seeks to: meet the development needs of their area; align growth and infrastructure; improve the environment; mitigate climate change (including by making effective use of land in urban areas) and adapt to its effects;

b) strategic policies should, as a minimum, provide for objectively assessed needs for housing and other uses, as well as any needs that cannot be met within neighbouring areas, unless:

- i. the application of policies in this Framework that protect areas or assets of particular importance provides a strong reason for restricting the overall scale, type or distribution of development in the plan area; or*
- ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.”*

For **decision-taking** this means:

“c) approving development proposals that accord with an up-to-date development plan without delay; or

d) where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:

- i. the application of policies in this Framework that protect areas or assets of particular importance provides a strong reason for refusing the development proposed; or*

ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole, having particular regard to key policies for directing development to sustainable locations, making effective use of land, securing well-designed places and providing affordable homes, individually or in combination.”

Housing

Paragraph 61 of the NPPF states that to support the Government’s objective of significantly boosting the supply of homes, it is important that a sufficient amount and variety of land can come forward where it is needed, that the needs of groups with specific housing requirements are addressed and that land with permission is developed without unnecessary delay. The overall aim should be to meet an area’s identified housing need, including with an appropriate mix of housing types for the local community.

Paragraph 64 states that where a need for affordable housing is identified, planning policies should specify the type of affordable housing²⁹ required (including the minimum proportion of Social Rent homes required), and expect it to be met on-site unless:

- a) off-site provision or an appropriate financial contribution in lieu can be robustly justified; and
- b) the agreed approach contributes to the objective of creating mixed and balanced communities.

Flood Risk

Paragraph 170 of the NPPF states that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.

Proposals must be consistent with the relevant guidance of the NPPF; the Technical Guidance to the NPPF and demonstrate how they have used the Strategic Flood Risk Assessment (SFRA) to determine the suitability of the proposal. Development proposals in Flood Zones 3 must take into account the vulnerability of proposed development.

Open Space

At paragraph 104, the NPPF sets out the government’s support for retaining open space, sports and recreational buildings and land including playing fields unless:

- a) an assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or

- b) the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or
- c) the development is for alternative sports and recreational provision, the benefits of which clearly outweigh the loss of the current or former use.

Natural Environment

At paragraph 187, the NPPF requires planning decisions to “enhance the natural environment by...

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

1.1.4. Planning Practice Guidance

The Government published the Planning Practice Guidance (PPG) in 2014 and have since updated relevant parts as appropriate. The PPG provide further detailed guidance accompanying the Framework. The following section of the PPG have been considered in the preparation of this planning application:

- Climate change,

- Design,
- Effective use of land,
- Environmental Impact Assessment,
- First homes,
- Flood risk and coastal change,
- Healthy and Safe Communities,
- Housing Supply and Delivery,
- Natural Environment,
- Noise, Open Space, Sports and Recreation, Public Rights of Way, and Travel Plans, Transport Assessment and Statements.

1.1.5. Building Regulations Part L 2021

The Building Regulations Approved Documents Part L 2010 (2013 edition incorporating 2016 amendments) set out the requirements for the *conservation of fuel and power*. It outlines the minimum energy and carbon dioxide emissions performance standards for all elements of the built environment along with assessment methodologies necessary to meet compliance within new developments. In December 2021, the Building Regulations was revised to help UK delivery net zero. The new Approved Documents for Part L now include Volumes 1 (dwellings) and 2 (buildings other than dwellings). The documents set out new limiting U-Values for improved fabric performance and introduced design submissions as well as built submissions. Volume 1 specifications set a provision for new dwellings to produce 30% less CO₂ than current standards, while Volume 2 mandates a 27% reduction in emissions for new non-domestic buildings, including offices and shops. The limiting u-values for new fabric elements and air permeability are defined in Tables 4.1 of both Volumes 1 and 2. New developments coming forward are expected to comply with specified parameters in order to be granted planning consent. In addition, further criteria must be met:

- **Applicable to all new buildings:** Requirement to achieve a minimum energy performance against a target CO₂ emission rate that shall not be exceeded.
- **Applicable to all new buildings:** Requirement for new buildings to achieve or better a fabric efficiency target, in addition to the CO₂ target.
 - **Only applicable to new dwellings:** Requirement to achieve a Dwelling Fabric Energy Efficiency (DFEE) lower than the Target Fabric Energy Efficiency (TFEE).
- **Applicable to all new buildings:** Requirement to achieve minimum energy performance against a target primary energy rate that shall not be exceeded, in addition to the CO₂ target.

The Approved Documents came into effect on the 15 June 2022 for use in England. It does not apply to work subject to a building notice, full plans application or initial notice submitted before that date, provided the work for each building started before 15 June 2023. Therefore, transitional arrangements do not apply to this scheme and the proposed development should comply with Part L 2021.

Part L 2021 regulations are a stepping-stone for the Future Homes Standard (FHS), which is anticipated to come into effect in 2025. FHS will ensure that all new homes built from 2025 will produce 75% less CO₂ compared to current standards. FHS will imply all future homes to be 'net zero ready', without the need retrofitting.

1.2. Regional and Local Regulation

The Proposed Development is situated within the administrative area of Folkestone & Hythe District Council. The local planning policy as mandated by Folkestone & Hythe District Council are detailed below.

1.2.1. Core Strategy Review (2022)

The Core Strategy Review is a long-term plan bringing together the aims and actions of the government, local councils, residents, businesses and voluntary groups, by managing development. It was adopted on 30 March 2022 and replaces the 2013 Core Strategy.

Four strategic needs set out priorities for the sustainable development of the district. The Strategic Need D discusses – *“The challenge to plan for strategic development which fosters high quality place- making with an emphasis on sustainable movement, buildings and green spaces.”*

The sustainability and energy related policy in the Core Strategy Review includes:

Policy SS1 District Spatial Strategy

Within the 'Urban Area', the future spatial priority for new development is of vacant previously developed land, regenerating Western Hythe and securing new accessible public green space.

In all locations throughout the district, development should be designed to directly contribute to the sense of place and sustainable design as set out in Policy SS3.

Policy SS3 Place-Shaping and Sustainable Settlements Strategy

“The principle of development is likely to be acceptable on previously developed land within defined settlements, provided it is not of high environmental value. All development must also meet the following requirements:

a. The proposed development should not be of a size, scale and nature that is disproportionate to the level of services which the settlement is capable of providing and

should preserve the character of the settlement and maintain its status in the settlement hierarchy.

b. For development located within zones identified by the Environment Agency (EA) as being at risk from flooding, or at risk of wave over-topping in immediate proximity to the coastline (within 30 metres of the crest of the sea wall or equivalent), site-specific evidence will be required in the form of a detailed flood risk assessment. This will need to demonstrate that the proposal is safe and meets with the sequential approach within the applicable character area (Urban Area, Romney Marsh Area or North Downs Area), and where applicable, the exception tests set out in national policy utilising the current applicable Strategic Flood Risk Assessment (SFRA). A site-specific flood risk assessment may be required for other sources of flood risk as identified within EA surface water flood mapping. Development must also meet the following criteria as applicable:

- i. no residential development, other than replacement dwellings, should take place within areas identified at “extreme risk” as shown on the SFRA 2115 climate change hazard maps;
- ii. all applications for replacement dwellings, should, via detailed design and the incorporation of flood resilient construction measures, reduce the risk to life of occupants and seek provisions to improve flood risk management; and
- iii. strategic-scale development proposals should be sequentially justified against district-wide site alternatives

c. A design-led and sustainable access approach should be taken to density and layout, ensuring development is suited to the locality and its needs, and transport infrastructure (particularly walking/cycling). Efficient use should be made of central land in town centres or in easy walking distance of rail and bus stations, with appropriate redevelopment of complementary uses above ground floor retail, leisure or other active uses, to directly support the vitality of centres.

d. Proposals should be designed to contribute to local place-shaping and sustainable development by:

- i. preserving and wherever possible enhancing statutory and non-statutory listed buildings, monuments and conservation areas and other key historic features of conservation interest and their setting; and
- ii. including sustainable construction measures, measures to optimise water efficiency and (in cases of new-build development), measures to optimise energy usage from renewable and low carbon sources.

e. Development must address social and economic needs in the neighbourhood and not result in the loss of community, cultural, voluntary or social facilities (unless it has been

demonstrated that there is no longer a need or alternative social/community facilities are made available in a suitable location)”

Policy SS5 District Infrastructure Planning

Developments should contribute via S106 contributions and CIL contributions – in accordance with the Council’s Infrastructure Delivery Plan.

Planning permissions will only be granted where suitable developer contributions are secured or are accompanied by a CIL liability notice, and where:

- a) The design of a development aims to reduce unnecessary or unsustainable demands on physical and social/community infrastructure, and environmental or utility network capacity;
- b) Development does not jeopardise current or planned physical infrastructure; and
- c) The location, design or management of development provides a choice of means of transport and allows sustainable travel patterns. Tailored solutions will be developed to limit car use generated by new developments. All major trip-generating uses will provide Travel Plans.

Where the provision of infrastructure is necessary to facilitate and/or mitigate the impacts of development, developers will be required to provide the necessary infrastructure and/or make a proportionate contribution towards such infrastructure – secured by planning obligations and, where appropriate, other agreements, including Section 278 agreements.

Policy SS8 New Garden Settlement - Sustainability and Healthy New Town Principles

“(1) A sustainable new town

a. Development shall be guided by an energy strategy. The strategy shall demonstrate how best practice in energy conservation and generation will be achieved at both the micro- and macro-level in homes and commercial buildings. The strategy shall include the potential for a site-wide heat and power network and decentralised energy networks, taking into account the AONB and its setting;

b. All new build housing shall be built to water efficiency standards that exceed the current building regulations so as to achieve a maximum use of 110 litres per person per day of potable water (including external water use). The development shall be informed by a Water Cycle Strategy which includes detail of:

- i. Water efficiency, and demand management measures to be implemented to minimise water use and maximise the recycling and reuse of water resources (i.e., through the use of 'grey' water) across the settlement, utilising integrated water management solutions.

- ii. *The need to maintain the integrity of water quality, how it will be protected and improved, and how the development complies with the Water Framework Directive.*
 - iii. *Surface water management measures to avoid increasing, and where possible to reduce, flood risk through the use of Sustainable Drainage Systems (SuDS); and*
 - iv. *Water services infrastructure requirements and their delivery having regard to Policy CSD5, and as agreed with the relevant statutory providers, and the Environment Agency's guidance on Water Cycle Studies.*
- c. All proposed development will have to satisfy the requirements of policy CSD5 (d). in order to avoid any significant impact on the water quality of the Stodmarsh European designated sites;*
- d. For non-residential development, development shall achieve BREEAM 'excellent' standard including addressing maximum water efficiencies under the mandatory water credits.*
- e. The energy strategy shall demonstrate how the development takes a fabric-first approach, makes the maximum use of passive solar gain, as well as energy generation from the latest technologies in and on buildings and structures. All community buildings shall seek to meet zero carbon standards as exemplars, with an aspiration for the development to achieve carbon neutrality.*
- f. The energy strategy shall demonstrate how the settlement will meet the government's commitment to ban all new petrol and diesel cars and vans by 2040 and include measures from the outset for all properties to have ready access to slow, fast and rapid electric charging points; with integration of technologies into work places, community buildings, car parks and infrastructure to facilitate the transition to electric vehicles and provide appropriate charging facilities for electric bus provision at the transport hub;*
- g. The application shall be accompanied by a site-wide waste strategy that demonstrate how a significant reduction in household waste and an increase in recycling rates will be delivered in comparison with the average across the county. Internal and external storage for recycling and waste shall be provided for all homes and businesses;*
- h. Construction and land forming of the settlement shall be soil neutral to avoid any importing or exporting of earth;*
- i. Proposals will be accompanied by a minerals assessment which includes information concerning the availability of minerals within the site, their scarcity, the timescale for the development and the practicality and viability of the prior extraction of any identified mineral resources. Reference should be made to 'Safeguarding Supplementary Planning*

Document' (KCC, 2017) and 'Minerals Safeguarding in England: Good Practice Advice' (British Geological Survey, 2011); and

j. Proposals shall set out measures for the remediation of contaminated land. The assessment of contaminated land should be phased, starting with a Phase 1 Investigation (or Desk Study) the results of which will determine the requirement for a Phase 2 Investigation (intrusive investigation), which will in turn determine any requirement for a Remediation Strategy and Verification Report.

(2) A healthy new town

a. Proposals shall create a vibrant, healthy place to live by promoting physical activity and more active lifestyles for all age groups, facilitating community building. Preventative health care measures shall include:

- i. *The provision of high quality public open spaces that are easily accessible for all age groups;*
- ii. *Noise and air pollution mitigation measures such as distance buffers between the M20/High Speed 1 transport corridor and the development, incorporating landscaping within the buffers designed to integrate with the wider green infrastructure network;*
- iii. *The design of streets and spaces shall encourage community outdoor activities including play and meeting places and the provision of tactile public art, with homes orientated to encourage informal overlooking. Provision should be made for elderly people through the careful consideration of access, mobility, facilities, shelter and seating, with opportunity given for intergenerational activity; and*
- iv. *Sustainable access and transport shall be promoted in accordance with Policy SS7(6);*

b. Allotments and community orchards for local food growing shall be provided on fertile land with safe and convenient access from all residential neighbourhoods; and

c. In lower density areas generous gardens should be provided as part of an appropriate mix of housing, alongside high quality communal spaces. In higher density areas where larger gardens are not feasible, new homes should have access to an allotment or community orchard within 800m (10 minutes' walk)."

Policy CSD4 Green Infrastructure of Natural Networks, Open Spaces and Recreation

"The council will require development proposals over their lifetime:

- i. *To provide net gains in biodiversity at least to comply with statutory and/or national policy requirements (assuming no residual loss);*

- ii. *To demonstrate that they protect and enhance valued landscapes, sites of biodiversity or geological value and soils, commensurate to their status and quality;*
- iii. *So far as possible, to deliver improvements in green infrastructure (GI) assets in the district and ensure positive management of areas of high landscape quality or high costal/recreational potential identified in the Green Infrastructure Report (2011) (or any updates to this report)."*

Policy CSD5 Water and Coastal Environmental Management

"Development should contribute to sustainable water resource management which maintains or improves the quality and quantity of surface and ground water bodies, and where applicable, the quality of the coastal environment and bathing waters.

This will be achieved by protecting or enhancing natural water reserves through sustainable design and construction, managing development in relation to wastewater infrastructure, and promoting long-term resilience to climatic pressures on the coast and water systems. Proposals must be designed to contribute to the maintenance of a sustainable supply of water resources in the district; the achievement of water management plans for the district; and the maintenance of coastal ecological habitats (through seeking to avoid the inhibition of natural coastal processes).

Development will be permitted where the following criteria are met:

- a. *All developments should incorporate water efficiency measures appropriate to the scale and nature of the use proposed. Planning applications for the construction of new dwellings should include specific design features and demonstrate a maximum level of usage to meet the higher water efficiency standard under Regulation 36(3) of the Building Regulations to achieve a maximum use of 110 litres per person per day (including external water use). Proposals should demonstrate that water efficiency and water re-use measures have been maximised and should seek to significantly exceed this standard.*
- b. *Fornon-residential development, the development achieves BREEAM 'excellent' standard addressing maximum water efficiencies under the mandatory water credits, where technically feasible and viable;*
- c. *New buildings and dwellings must be delivered in line with wastewater capacity, and designed so as to ensure that, in relation to greenfield development, peak rate of surface water runoff from the site is not increased above the existing greenfield surface water runoff rate, incorporating appropriate sustainable drainage systems (SuDS) where feasible and water management features, with full consideration given to integration of water management. The quality of water passed on to watercourses and the sea must be maintained or improved, and flood risk must not be increased by developments within the district; and*

- d. *Development which could have an impact on water quality in the Stodmarsh European-designated sites through increased nutrient levels from wastewater discharges will be required to provide evidence of nutrient impacts through a nutrient budget approach at the point of submission of the planning application. This requirement will apply to development within the Stour Operational Catchment, or within the catchment areas of Wastewater Treatment Works discharging into the Stour Operational Catchment, as identified on the Policies Map. Planning permission will only be granted if:*

- i. *The applicant can demonstrate, subject to meeting the tests of the Habitat Regulations, that the development would not have a significant effect on the Stodmarsh European sites either alone or in combination with other plans and projects; and*
- ii. *The applicant can demonstrate that the development will provide all requisite mitigation measures to avoid any likely significant effect on the Stodmarsh European sites as may be necessary through a Design and Implementation Plan. The Design and Implementation Plan will set out the proposed nutrient neutrality mitigation measures, how the measures will be implemented and how they will be secured for the lifetime of the development. This plan will be required to be submitted to and approved by the Council before planning permission can be granted. The mitigation measures in the Design and Implementation Plan shall be secured by planning condition or planning obligation as appropriate.*

Water reserves and the coastal environment will be maintained and enhanced through the council working with partners to manage development and upgrade water infrastructure and quality, and through green infrastructure provisions (policy CSD4)."

Policy CSD7 Hythe Strategy

"Hythe should develop as the high-quality residential, business, service, retail and tourist centre for the central district in line with the vision in paragraph 3.15. All new development, including that on the former Nickolls Quarry site (identified in Figure 5.6), should respect the historic character of the town and the established grain of the settlement in line with the place-shaping principles set out in policy SS3."

1.2.2. Places and Policies Local Plan (2020)

Policy C3 Provision of Open Space

To meet the additional need in open space generated by new residential developments the Council will require proposals of 20 or more dwellings to provide for open space in accordance with the standards in Table 12.1.

This gross open space calculation may include provision of publicly available:

- a) SuDS;
- b) Informal sports pitches; and
- c) Formal play spaces.

Any new open space should be transferred to and maintained in perpetuity or the local Town or Parish Council, the District Council or appropriate community group or charity, subject to payment of a commuted sum.

Existing open spaces will be safeguarded. Development proposals that would result in the loss of open spaces will be granted provided that:

- a) An assessment has been undertaken which clearly identifies the open space is surplus to requirements; or
- b) The loss resulting from the proposed development would be replaced by equivalent or better provision in terms of the standards; or
- c) The development is for alternative sports and recreational provision, the needs for which clearly outweigh the loss.

Policy T1 Street Hierarchy and Site Layout

Planning permission for major developments will be granted if the Design and Access Statement submitted as part of the application demonstrates attention has been paid to street design.

An application should show that:

1. The street hierarchy considers pedestrians first and private motor vehicles last;
2. Permeability is provided through and beyond the site for all users;
3. An environment is created that is safe for all street users, which encourages walking, cycling and the use of public transport;
4. A range of street types is created providing legibility throughout the development, meeting the needs of all users, and not allowing vehicles to dominate;
5. Active frontages are created throughout the development, particularly in relation to publicly-accessible areas, for the purposes of natural surveillance and creating characterful places; and
6. Appropriate street furniture and signage is included only when necessary for reasons of safety, orientation or comfort of residents and visitors.

Policy T2 Parking Standards Residential Parking

The Council will use the parking standards provided in Table 13.1, whilst accounting for local context.

Applicants should demonstrate that:

- a) Priority has been given to on-street parking in well-designed streets;
- b) There is sufficient parking for residents and visitors, with a preference for unallocated parking;
- c) Parking is positioned close to people's homes;
- d) Parking courtyards are small in size, with no more than five properties using each courtyard, and they are well overlooked;
- e) Any roofed parking structures are proportionate so that they do not dominate the street scene, and are well-integrated into the overall design of the development;
- f) A variety of parking treatments has been considered on sites of more than 5 dwellings;
- g) The schemes shows a preference for tandem on-plot parking if more than one off-street space is provided per dwelling;
- h) Spaces are of sufficient size to comfortably host a larger car, and on-plot spaces have sufficient space for the movement of wheeled waste bins to a collection point (as required);
- i) A charging point for electric vehicles is provided at a ratio of 1 per dwelling as far as is reasonably practicable
- j) Covered cycling facilities have been integrated into the residential parking offer; and
- k) Measures have been taken to discourage the parking of Heavy Goods Vehicles, in accordance with Policy T4 below.

Policy T5 Cycle Parking

“Planning permission will be granted for residential development subject to the provision of cycle parking at the following quanta:

Individual residential developments - 1 space per bedroom

Sheltered accommodation - 1 space per 5 units

Cycle Parking Standards

Parking should be provided either within the curtilage of a residential dwelling or in a secure communal facility, where a suitable alternative is not available.

Any external residential cycle parking should be secure, covered and preferably constructed from the same materials as the main structure.

Any planning application involving cycle parking should demonstrate how the proposal accords with the aspirations and guidance set out in Building for Life 12 with regard to the provision of cycling facilities.

Cycle parking requirements for non-residential uses will be provided in agreement with the Council.”

Policy NE1 Enhancing and Managing Access to the Natural Environment

To enhance access to the natural environment the Council will:

- a) Target opportunities for improvements on routes and links from urban areas where access is currently poor, except where there would be an adverse impact on sensitive areas; and
- b) Improve access to key open spaces identified in the Green Infrastructure Strategy from all areas

Policy NE2 Biodiversity

“Development and the Natural Environment

All new development will be required to conserve and enhance the natural environment, including all sites of biodiversity or geodiversity value (whether or not they have statutory protection) and all legally protected or priority habitats and species. “

Policy NE3 Protecting the District's Landscapes and Countryside

The impact of individual proposals and their cumulative effect on the Kent Downs Area of Outstanding Natural Beauty (AONB) and its setting will be carefully assessed. It must be demonstrated that all the following criteria have been met:

- a) The natural beauty and locally distinctive features of the AONB and its setting are conserved and enhanced;
- b) Proposals reinforce and respond to the distinctive character and special qualities of the AONB, with appropriate scale, setting and materials; and
- c) Development is appropriate to the economic, social and environmental wellbeing of the area.

Proposals should protect or enhance the natural beauty of the Special Landscape Area and Local Landscape Areas.

Policy NE5 Light Pollution and External Illumination

Applications for major development, and development including significant external lighting, will be approved if:

1. *The proposal does not materially alter light levels outside the development site;*
2. *The proposal does not adversely affect the use or enjoyment of nearby buildings or open spaces; and*
3. *The proposed lighting scheme accords with the best practice guidance provided by the Institution of Lighting Professionals (ILP) (2011) relevant to the particular Environmental Zone (see table below).*

Applications should include a lighting assessment with details of the following:

- i. *Where the light shines;*
- ii. *When the light shines;*
- iii. *How much light shines; and*
- iv. *Possible ecological impact.*

Policy HB3 Internal and External Space Standards

Planning permission will be granted for new build residential development and conversions for residential use where the proposed scheme:

1. Meets the nationally described technical housing space standard, or subsequent updates to the standard, including minimum floor-to-ceiling heights;
2. Provides an area of private open space for each new or converted dwelling as one or both of the following:
 - i. A private usable balcony area with a minimum depth of 1.5m for flats, as long as this does not reduce the privacy of neighbouring dwellings;
 - ii. An area of private garden for the exclusive use of an individual dwelling house of at least 10m in depth and the width of the dwelling. In the case of infill developments there should be sufficient space retained for the original dwelling;
3. Demonstrates consideration of the acoustic environment of outside spaces so they can be enjoyed as intended;
4. Provides each dwelling with discretely designed and accessible storage space for the different types of refuse bin; and
5. Provides bicycle storage in accordance with Policy T5: Cycle Parking

Policy CC1 Reducing Carbon Emissions

“Planning applications for all major new build housing developments and new non-residential buildings of 1,000sqm or more gross floorspace will be required to reduce carbon emissions by a minimum of 10 per cent above the Target Emission Rate, as defined

in the Building Regulations for England approved document L1A: Conservation of Fuel and Power in Dwellings.

This should be through the use of on-site renewable and low-carbon energy technologies which could include an integrated system or site-wide solution involving the installation of a system that is not integrated with in the new building.”

Policy CC2 Sustainable Design and Construction

“Proposals for all new dwellings or for new non-domestic buildings will be permitted where:

- 1. All new build housing is built to the higher water efficiency standard under Regulation 36(3) of the Building Regulations so as to achieve a maximum use of 110 litres per person per day including external water use where technically feasible and viable. Proposals should demonstrate that water efficiency and water re-use measures have been maximised;*
- 2. For non-residential development, the development achieves BREEAM 'Very Good' standard including addressing maximum water efficiencies under the mandatory water credits, where technically feasible and viable;*
- 3. The development minimises energy demand through passive design and layout and landscape mitigation measures with an aspiration for new major residential developments to achieve zero carbon homes;*
- 4. The development is accessible to all and is designed to be flexible towards future adaptation in response to changing life needs;*
- 5. The development includes measures to adapt to climate change, such as the provision of green infrastructure, sustainable drainage systems (SuDS) in accordance with Policy CC3, suitable shading of pedestrian routes and open spaces and drought resistant landscaping; and*
- 6. The development provides discretely designed and accessible storage for waste, recycling and composting.*

The standards achieved as detailed above may be a matter for negotiation at the time of the planning application, having regard to abnormal costs, economic viability, the feasibility of meeting the standards on a specific site and other requirements associated with the development. This should be based on quantitative financial evidence. Planning applications for extensions to commercial buildings should include sustainable design measures when applicants apply for planning permission unless the improvements are not viable.”

Policy CC3 Sustainable Drainage Systems (SuDS)

“Development will be permitted where:

- 1. Surface water is managed close to its source and on the surface where reasonably practicable to do so;*
- 2. Priority is given to the use of ecosystem services as defined in the Planning Practice Guidance;*
- 3. Water is seen as a resource and is reused where practicable, offsetting potable water demand, and that a water sensitive approach is taken to the design of the development;*
- 4. The features that manage surface water are commensurate with the design of the development in terms of size, form and materials and make an active contribution to place-making;*
- 5. Surface water management features are multi-functional wherever possible in their land use;*
- 6. There is no discharge from the developed site for rainfall depths up to 5mm of any rainfall event;*
- 7. The run-off from all hard surfaces receives an appropriate level of treatment in accordance with Sustainable Drainage Systems guidelines, SuDS Manual (CIRIA C753), to minimise the risk of pollution;*
- 8. Major development accords with Kent County Council's Drainage and Planning Policy Statement 2017 or successor document;*
- 9. Development adjacent to a water body actively seeks to enhance the water body in terms of its hydro morphology, biodiversity potential and setting; and*
- 10. All hard surfaces are permeable surfaces where reasonably practicable. The district is one of the driest districts in England, and this is only likely to increase given the likely impacts of climate change. Mechanisms to ensure the effective collection and reuse of water should be designed into any surface water drainage system. Any development should also ensure the drainage design is resilient to these future changes.”*

Policy HW2 Improving the Health and Wellbeing of the Local Population and Reducing Health Inequalities

“For residential development of 100 or more units and non-residential development in excess of 1,000sqm a Health Impact Assessment will be required, which will measure the wider impact of the development on healthy living and the demands that may be placed on health services and facilities arising from the development.

Where significant impacts are identified, measures to address the health requirements of the development should be provided and/or secured by planning obligations or planning conditions as appropriate.

A Health Impact Assessment for smaller forms of development may also be required where the proposal is likely to give rise to a significant impact on health, for example, the cumulative impacts of a number of developments might necessitate the need for new health or social infrastructure.”

Policy HW3 Development That Supports Healthy, Fulfilling and Active Lifestyles

Major applications should incorporate productive landscapes in the design and layout of buildings and landscaping to increase, create and safeguard opportunities for healthy and active lifestyles.

Policy HW4 Promoting Active Travel

“Planning permission will be granted for development likely to give rise to increased travel demands, where the site has (or will attain) sufficient integration and accessibility by walking and cycling including, where appropriate, through:

- 1. The provision of new cycle and walking routes that connect to existing networks, including the wider public rights of way network, to strengthen connections between settlements and the wider countryside;*
- 2. The protection and improvement of existing cycle and walking routes, including the public rights of way network, to ensure the effectiveness and amenity of these routes is maintained, including through maintenance, crossings, signposting and way-marking, and, where appropriate, widening and lighting;*
- 3. The provision of safe, direct routes within permeable layouts that facilitate and encourage short distance trips by walking and cycling between home and nearby centres of attraction, and to bus stops or railway stations, to provide real travel choice for some or all of the journey; and*
- 4. The provision of, or contributions towards, new cycle and walking routes identified in adopted strategic documents.”*

Policy HE1 Heritage Assets

“The Council will grant permission for proposals which promote an appropriate and viable use of heritage assets, consistent with their conservation and their significance, particularly where these bring at risk or under-used heritage assets back into use or improve public accessibility to the asset.”

Policy HE2 Archaeology

Important archaeological sites, together with their settings, will be protected and, where possible, enhanced. Development which would adversely affect them will not be permitted.

Proposals for new development must include an appropriate description of the significance of any heritage assets that may be affected, including the contribution of

their setting. Desk-based assessment, archaeological field evaluation and/or historic building assessment may be required as appropriate to the case.

1.2.3. Kent Minerals and Waste Local Plan (2025)

Policy CSW 1 Sustainable Development

“When considering waste development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework.”

Policy CSW 2 Waste Hierarchy

“Proposals for waste management must demonstrate how the proposed capacity will ensure that waste to be managed at the facility will be managed at the highest level of the Waste Hierarchy practicable, unless life cycle assessment (LCA) demonstrates otherwise.”

Policy CSW 3 Waste Reduction

“All new development must be designed in accordance with circular economy principles to:

- 5. Minimise the production of construction, demolition and excavation waste and manage any such waste arising during the development in accordance with Policy CSW 2;*
- 6. retain and repurpose existing structures where possible;*
- 7. allow for ease of redevelopment and refurbishment; and,*
- 8. maximise sustainable construction methods which include the use of recycled and recyclable materials and techniques which minimise waste and allow for ease of deconstruction and reuse of building components.*

For development which has a total floor space of greater than 1000 square metres and / or comprises greater than 10no. units of housing and / or where the site is 1 hectare or more, the above principles (1 to 4) should be demonstrated via the submission of a Circular Economy Statement.

All new development should include detailed consideration of waste arising from the occupation of the development including consideration of how waste will be stored, collected and managed.

In particular proposals should ensure that:

- 1. there is adequate temporary storage space for waste generated by that development allowing for the separate storage of recyclable materials;*

2. *as necessary, there is adequate communal storage for waste, including separate recyclables, pending its collection; and*
3. *storage and collection systems (e.g. any dedicated spaces, storage areas and chutes or underground waste collection systems), for waste are of high quality design and are incorporated in a manner which will ensure there is adequate and convenient access for users and waste collection operatives and will contribute to the achievement of waste management targets; and*
4. *adequate contingency measures are in place to manage any systems failures. All relevant proposals should be accompanied by a recycling and waste management strategy which considers the above matters and demonstrates the ability to meet local authority waste management targets.”*

Policy CSW 7 Waste Management for Non-hazardous Waste

“Waste management capacity for non-hazardous waste that assists Kent in continuing to be net self-sufficient while providing for a reducing quantity of London's waste, will be granted planning permission provided that:

1. *it moves waste up the hierarchy,*
2. *recovery of by-products and residues is maximised*
3. *energy recovery is maximised (utilising both heat and power); and*
4. *any residues produced can be managed or disposed of in accordance with the objectives of Policy CSW 2.”*

Policy DM 3 Ecological Impact Assessment

“All development shall achieve a net gain in biodiversity value in accordance with the requirements of the NPPF. All major development shall deliver at least a 10% net gain in biodiversity value with an expectation that the maximum practicable net gain is achieved.

All planning applications should be supported by a draft Biodiversity Gain Plan and relevant supporting reports that demonstrate net gain can be achieved, implemented, managed and maintained.”

1.2.4. The Folkestone & Hythe District Council Net Zero Toolkit

The Net Zero Toolkit’s main aim is to communicate how new developments that are consistent with climate change objectives can be designed and constructed. Net Zero carbon buildings are defined by four core principles that are inter-related. The impact of each one should be considered when measuring Net Zero performance. The principles are:

1. **Energy Efficiency**
Buildings should use energy efficiently for heating, cooling, lighting, and equipment to reduce costs, carbon emissions, and strain on energy networks.
2. **Low Carbon Heating**
New buildings must use low carbon heating/cooling from the start and avoid gas connections to support Net Zero goals.
3. **Renewable Energy**
Renewable energy generation, like solar panels, should match or exceed a building’s annual energy use to qualify as Net Zero.
4. **Embodied Carbon**
Buildings should minimise the carbon footprint of their materials, not just operational energy use.

Designs should also consider water, ecology, materials, transport, health, and wellbeing to benefit people and the environment now and in the future.

Appendix B BREEAM Pre-Assessment: Spa and Hotel Extension, and Leisure Building

BREEAM UK New Construction V6.1	
Project Name:	Imperial Gardens
Building Type:	Other - Residential institution (short term stay)
Scope:	Fully Fitted
Target rating:	Excellent
Date:	22/12/2025

Targeted
Potential
Difficult
Unachievable
Mandatory credits for the targeted rating

EXE - Exemplary credit worth 1%

Credit Code		Credit Title	Credits Available	T	P	D	U	Action Lead	Stage	Comments
MANAGEMENT			credit weight =	0.52%						
MAN 01	Credit 1	Project delivery planning	1	1				GSE Property Group	Stage 2+ action	Roles and responsibilities of all project team members should be defined during Stage 2 in accordance with BREEAM requirements. Relevant documents such as Initial Project Brief, Project Execution Plan, Internal Communication Strategy, Responsibility Matrix covering all the key phases of project delivery will be required as evidence.
	Credit 2	Stakeholder consultation (interested parties)	1	1				Lichfields	Stage 2+ action	Lichfields to confirm that the third-party consultation for planning will include all BREEAM-required interested parties and the minimum consultation contents. Additional consultation will be required at Stage 2+ if any gaps are identified.
	Credit 3 Pre-req.	Performance targets formally agreed: Pre-requisite	-	Yes				GSE Property Group / Design team	Stage 2 action	BREEAM target 'Excellent' has been formally agreed during Stage 2.
	Credit 3	BREEAM Advisory Professional credit (Concept Design)	1	1				Hilson Moran (BREEAM)	Stage 2 action	BREEAM AP role should be fulfilled with pre-assessment stage input.
	Credit 4	BREEAM Advisory Professional credits (Developed Design)	1	1				GSE Property Group / BREEAM AP		BREEAM AP to be appointed during Stage 3 and Stage 4.
MAN 02	Credits 1-2	Elemental life cycle cost (LCC)	2	2				GSE Property Group / Cost Consultant	Stage 2+ action	Cost Consultant to be appointed to provide the ELCC during Stage 2+.
	Credit 3	Component level LCC Plan - Options appraisal	1	1				GSE Property Group / Cost Consultant		GMS / Cost consultant to confirm the credits - last time these credits were not targeted.
	Credit 4	Capital cost reporting	1	1				Cost Consultant		Cost Consultant to report the capital cost for the RFO works in £k/m2.
MAN 03	Pre-req.	Timber: Pre-requisite	-	Yes				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.

	Credit 1	Environmental management	1	1			Principal Contractor / GSE Property Group / Cost Consultant	Requirements to be included in Principal Contractor's Prelims.
	Credit 2 Pre-req.	Performance targets formally agreed with contractor: Pre-requisite	-	Yes			Principal Contractor / GSE Property Group / Cost Consultant	Requirements to be included in Principal Contractor's Prelims.
	Credit 2	BREEAM AP (site)	1	1			Principal Contractor / GSE Property Group / Cost Consultant	Requirements to be included in Principal Contractor's Prelims.
	Credit 3-4	Responsible construction management	2	2			Principal Contractor / GSE Property Group / Cost Consultant	Requirements to be included in Principal Contractor's Prelims.
	Credit 5&6 Pre-req.	Monitoring of construction site impacts: Pre-requisite	-	Yes			Principal Contractor / GSE Property Group / Cost Consultant	Requirements to be included in Principal Contractor's Prelims.
	Credit 5	Utility consumption - Energy and Water	1	1			Principal Contractor / GSE Property Group / Cost Consultant	Requirements to be included in Principal Contractor's Prelims.
	Credit 6	Transport of construction materials and waste	1	1			Principal Contractor / GSE Property Group / Cost Consultant	Requirements to be included in Principal Contractor's Prelims.
	EXE Credit	Responsible construction management - Exemplary level	1	1			Principal Contractor / GSE Property Group / Cost Consultant	Requirements to be included in Principal Contractor's Prelims.
MAN 04	Credit 1	Commissioning testing schedule and responsibilities	1	1			Principal Contractor / GSE Property Group / Cost Consultant	Requirements to be included in Principal Contractor's Prelims. During the design stage, the client or the principal contractor appoints the specialist commissioning manager.
	Credit 2	Commissioning design and preparation	1	1			Principal Contractor / GSE Property Group / Cost Consultant	Requirements to be included in Principal Contractor's Prelims. During the design stage, the client or the principal contractor appoints the specialist commissioning manager.
	Credit 3	Testing and inspecting building fabric	1	1			Principal Contractor / GSE Property Group / Cost Consultant	Requirements to be included in Principal Contractor's Prelims.
	Credit 4	Handover - Building User Guide and Training	1	1			Principal Contractor / GSE Property Group / Cost Consultant	Requirements to be included in Principal Contractor's Prelims.
MAN 05	Credit 1	Aftercare support	1	1			Principal Contractor / GSE Property Group / Cost Consultant	Requirements to be included in Principal Contractor's Prelims.
	Credit 2	Commissioning implementation (seasonal)	1	1			Principal Contractor / GSE Property Group / Cost Consultant	Requirements to be included in Principal Contractor's Prelims.
	Credit 3	Post occupancy evaluation	1	1			GSE Property Group / Hythe Imperial Hotel	GSE / Hythe Imperial Hotel to appoint an independent party to carry out a POE exercise one year after the building is substantially occupied.
HEALTH & WELLBEING			credit weight = 0.78%					

HEA 01	Credit 1	Control of glare from sunlight	1	1				GSE Property Group / Architect		The office on the ground floor has no windows therefore no risk of glare. A glare control strategy should be implemented to design out the potential for glare in the reception.
	Credit 2	Daylighting	1				1	-		Not targeted.
	Credit 3	View out	1				1	-		Not targeted, as the office on the ground floor has no windows.
	Credit 4	Internal and external lighting levels, zoning and control	1	1				GSE Property Group / Lighting specialist		Requirements to be included in the lighting specification in later stage.
	EXE Credit	Daylighting - Exemplary level	1				1	-		Not targeted.
	EXE Credit	Internal and external lighting levels - Exemplary level	1				1	-		Not targeted.
HEA 02	Pre-req.	Indoor air quality plan: Pre-requisite	-	Yes				GSE Property Group / Air Quality Consultant		IAQP to be produced in design stage and implemented.
	Credit 2	Ventilation	1				1	-		Not targeted.
	Credit 3	Emissions from construction products VOC (products specifications)	2	1	1			GSE Property Group / Architect		Requirements of low VOCs to be included in the products specification in later stage. Refer to GN22.
	Credit 4	Post Construction Indoor Air Quality Measurement	1		1			GSE Property Group		Currently this one credit is kept as potential.
	EXE Credit	Exemplary performance for VOC (products specs)	1				1	-		Not targeted.
HEA 04	Credit 1	Thermal modelling	1	1				GSE Property Group / Energy Assessor	Stage 2+ action	Thermal comfort modelling is to be undertaken during Stage 2+ (as required by Ene 04). A BREEAM-compliant report can be provided at a later stage if required.
	Credit 2	Design for future thermal comfort	1	1				GSE Property Group / Energy Assessor		Thermal comfort modelling is to be undertaken during design stage. A BREEAM-compliant report can be provided at a later stage if required.
	Credit 3	Thermal zoning and controls	1	1				GSE Property Group / MEP Consultant		Requirements to be included in the mechanical specification in later stage.
HEA 05	Credit 1	Acoustic performance for Residential institutions	4	4				GSE Property Group / Acoustics Consultant		Requirements to be reviewed in later stage.
HEA 06	Credit 1	Security of site and building	1	1				GSE Property Group / Security Assessor	Stage 2+ action	A suitably qualified security specialist consultant to be appointed to undertake a Security Needs Assessment during Stage 2+. The controls and recommendations shall be incorporated into proposals and implemented in the as-built development. Any deviation from those controls and recommendations shall be justified and agreed with the SQSS.
	EXE credit	Security	1				1	-		Not targeted.
HEA 07	Credit 1	Safe access	1	1				Hollaway Studio		Hollaway Studio is to ensure that safe access is provided in compliance with the relevant BREEAM requirements.

	Credit 2	Outside space	1	1				Hollaway Studio		Hollaway Studio is to ensure that outside space is provided in compliance with the relevant BREEAM requirements.
ENERGY		credit weight = 0.70%								
ENE 01	Credit 1 to 9	Energy performance	9		1	1	7	GSE Property Group / Energy Assessor		Credits to be confirmed in later stage.
	Credit 10-13	Prediction of operational energy consumption	4	4				GSE Property Group / Energy Assessor		Prediction of operational energy consumption modelling to be undertaken in the design stage.
	EXE Credit	Beyond zero net regulated carbon / Carbon negative	5				5	-		Not targeted.
	EXE Credit	Post-occupancy stage	2				2	-		Not targeted.
ENE 02	Credit 1	Sub-metering of end-use categories	1	1				GSE Property Group / MEP Consultant		Requirements to be included in the electrical specification in later stage.
	Credit 2	Sub-metering of high energy load and tenancy areas	1	1				GSE Property Group / MEP Consultant		Requirements to be included in the electrical specification in later stage.
ENE 03	Credit 1	External Lighting	1	1				GSE Property Group / Lighting specialist		Requirements to be included in the lighting specification in later stage.
ENE 04	Credit 1	Passive design (<i>Hea 04 should be achieved</i>)	1	1				GSE Property Group / Energy Assessor	Stage 2+ action	Passive design analysis to be undertaken during Stage 2+.
	Credit 2	Free Cooling (<i>Credit 1 Passive design must be achieved</i>)	1				1	-		Not targeted.
	Credit 3	Low zero carbon (LZC) feasibility study	1	1				GSE Property Group / Energy Assessor	Stage 2+ action	Energy strategy will be provided in Stage 2 for planning. BREEAM compliant LZC report can be provided in Stage 2+ if required.
ENE 06	Credit 1	Lift & Escalator - Energy consumption	1	1				GSE Property Group / VT Consultant		Requirements to be included in the lift specification in later stage.
	Credit 2	Lift - Energy efficient features	1	1				GSE Property Group / VT Consultant		Requirements to be included in the lift specification in later stage.
ENE 08	Credit 1	Energy efficient equipment	2	2				GSE Property Group / Hythe Imperial Hotel		Identify the building's unregulated energy consuming loads and demonstrate a meaningful reduction in the total annual unregulated energy consumption of the building. Further details refer to Table 6.7 in the BREEAM Scheme. (i.e., laundry, fridges...)
TRANSPORT		credit weight = 0.83%								
TRA 01	Credit 1 & 2	Transport assessment and travel plan	2	2				DHA Transport	Stage 2+ action	Transport Assessment and travel plan should be provided in Stage 2+ to meet all BREEAM requirements.
TRA 02	Pre req Credit 1-10	Travel Assessment	-	Yes						As AI>8, 6 points required to get 10 credits below
TRA 02	Credit 1 to 10	Sustainable transport measures - details below (<i>Tra 01 credits must be achieved</i>)	10	6	4					DHA Transport has confirmed that the existing AI is 6.78 using the Tra 01 Calculator.
	Measure 1	Public transport location AI ≥ 8	-	No				-		DHA Transport has confirmed that the existing AI is 6.78 using the Tra 01 Calculator.
	Measure 2	Increase of the existing local transport services	-	No						Not targeted as confirmed by DHA.
	Measure 3	Provide a public transport information system	-	No				-		Not targeted as confirmed by DHA.

	Measure 4	Provide electric cars recharging stations	-	Yes				DHA Transport		DHA Transport to confirm whether provision of EV points meets relevant BREEAM requirements or not.
	Measure 5	Set up a car sharing facility	-	TBC				GSE Property Group / DHA Transport		Kept as potential as confirmed by DHA. Can be reviewed at a later stage following the development of the travel plan.
	Measure 6	Implement a measure chosen with the local authority	-	Yes				Lichfields / DHA Transport	Stage 2 action	DHA Transport has confirmed that these two points can be targeted. Consultation has been undertaken since Stage 1.
	Measure 7	Install compliant cycle storage spaces	-	Yes				DHA Transport / Hollaway Studio		BREEAM requirements: 1 space per 10 staff (Building Type A - use office buildings criteria. The unit of measure for visitors or beds does not apply to hotels) 50% reduction can be applied if the existing AI > 8. DHA Transport and Hollaway Studio to confirm the above.
	Measure 8	Provide at least 2 compliant cyclists facilities	-	Yes				DHA Transport / Hollaway Studio		At least two types of cyclist facilities are required - i.e., lockers, showers, changing spaces, drying spaces. DHA Transport and Hollaway Studio to confirm the above.
	Measure 9	At least three existing accessible amenities are present	-	Yes				DHA Transport		An appropriate food outlet, access to an outdoor open space, and access to a recreation or leisure facility for fitness or sports are available within 500 m. DHA will report these in the BREEAM-compliant transport assessment.
	Measure 10	Provide 1 or 2 new accessible amenities	-	Yes				Architect		Outdoor pool and gym provided on GF can be considered as 1 new amenity, as per KBCN1406.
	Measure 11	Implement 1 site-specific improvement measure	-	TBC				-		Any site site-specific improvement measure, not covered by the options already listed in this issue in line with the recommendations of the travel plan, can be discussed in later stage if required.
WATER			credit weight = 0.78%							
WAT 01	Credit 1 to 5	Water consumption	5	5				GSE Property Group / MEP Consultant / Architect		Design team to specify the new domestic water-consuming components with lower flow rates, to ensure min. of 55% improvement over BREEAM baseline achieved. Requirements to be included in the Sanitaryware schedule and the mechanical specification.
	EXE Credit	Water consumption	1				1	-		Not targeted.
WAT 02	Credit 1	Water Sub-metering	1	1				GSE Property Group / MEP Consultant		Requirements to be included in the mechanical specification in later stage.
WAT 03	Credit 1	Leak detection system	1	1				GSE Property Group / MEP Consultant		Requirements to be included in the mechanical specification in later stage.
	Credit 2	Flow control devices	1	1				GSE Property Group / MEP Consultant		Requirements to be included in the mechanical specification in later stage.
WAT 04	Credit 1	Water efficient equipment	1	1				-		Swimming pool and irrigation have been identified as sources of unregulated water consumption. The specialist should identify any measures to reduce unregulated water use at later stage.
MATERIALS			credit weight = 1.07%							

MAT 01	Credit 1 to 6	Life cycle impacts - Superstructure	6	6				GSE Property Group / Hilson Moran (LCA) / Holloway Studio	Stage 2 action	Life cycle assessment (LCA) has been undertaken prior to Planning. Please note LCA is also required to be undertaken during Stage 4.
	Credit 7	Life cycle impacts - Substructure and hard landscaping	1	1				GSE Property Group / Hilson Moran (LCA) / Holloway Studio / Lloyd Bore	Stage 2 action	Life cycle assessment (LCA) has been undertaken prior to Planning.
	EXE Credit	Core building services	1				1	-		Not targeted.
	EXE Credit	LCA and LCC alignment	1				1	-		Not targeted.
	EXE Credit	Third party verification	1		1			GSE Property Group / Third Party Verifier		Currently keep as potential - can be undertaken in later stage if required.
MAT 02	Credit 1	Environmental impacts construction products – EPD	1	1				GSE Property Group / Design Team		Specify construction products with EPD that achieve a total EPD points score of at least 20 following relevant BREEAM requirements.
MAT 03	Pre-req.	Legally harvested and traded timber: Pre-requisite	-	Yes				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.
	Credit 1	Enabling Sustainable procurement plan	1	1				Principal Contractor / GSE Property Group / Cost Consultant	Stage 2+ action	Sustainable procurement plan to be provided in Stage 2+.
	Credits 2 to 4	Measuring Responsible sourcing of materials	3	1	1		1	Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.
	EXE Credit	Exemplary Performance for Responsible Sourcing	1				1	-		Not targeted.
MAT 05	Credit 1	Protecting vulnerable parts of the building from damage & Protecting exposed parts of the building from material degradation	1	1				GSE Property Group / Architect		Architect to consider 'protecting vulnerable parts of the building from damage' and 'protecting exposed parts of the building from material degradation'. Relevant BREEAM requirements should be followed.
MAT 06	Credit 1	Material efficiency	1	1				Hilson Moran (CE) / Principal Contractor / GSE Property Group / Cost Consultant	Stage 2 action	Materials efficiency opportunities should be identified and documented during Stage 2. Updates to be provided for each stage. Stage 1 action has been covered by the circular economy statement. Requirements to be included in Principal Contractor's Prelims.
WASTE			credit weight = 0.60%							
WST 01	Credit 1	Pre-demolition audit	1	1				GSE Property Group / Demolition Contractor	Stage 2+ action	A pre-demolition audit to be undertaken prior to any strip-out or demolition works on-site.
	Credit 2	Construction resource efficiency	3	1	1		1	Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims. Construction waste generated per 100m2 (GIA) cannot be higher than 13.3 m3 OR 11.1 tonnes.

	Credit 3	Diversion of resources from landfill	1	1				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims. Percentages of non-hazardous construction and demolition waste generated have been diverted from landfill: - Non-demolition: min. 70% (volume) OR 80% (tonnage) - Demolition: min. 80% (volume) OR 90% (tonnage)
	EXE credit	Exemplary Performance for Construction Waste Management	1				1	-		Not targeted.
WST 02	Pre-req.	Project sustainable aggregate points		No				-		Not targeted.
	Credit 1	Project sustainable aggregate points	1				1	-		Not targeted.
	EXE Credit	Exemplary Performance for Recycled Aggregates	1				1	-		Not targeted.
WST 03	Credit 1	Operational waste	1	1				GSE Property Group / Architect		A dedicated space should be provided for operational waste generated following relevant BREEAM requirements.
	Credit 1	Adaptation to climate change - Structural and fabric resilience	1	1				GSE Property Group / Sustainability Consultant	Stage 2+ action	Study required during Stage 2+ to identify risks to the building from climate change and identification of measures to mitigate these risks.
WST 05	EXE Credit	Exemplary Performance Responding to Climate	1				1	-		Wst 05 exemplary credit can be targeted once the following requirements targeted: Hea 04 - Criterion 6 Ene 01 - min. of 6 credits Ene 04 - The passive design analysis credit Wat 01 - min. of 3 credits Mat 05 - Criteria 2~4 Pol 03 - 1 credit for flood resilience PLUS 2 credits for surface water run-off.
	Credit 1	Design for disassembly and functional adaptability - recommendations	1	1				GSE Property Group / Architect	Stage 2+ action	Architect to provide the BREEAM compliant report during Stage 2+.
WST 06	Credit 2	Design for disassembly and functional adaptability - implementation	1	1				Architect / Principal Contractor / GSE Property Group / Cost Consultant		Updates to be provided by Architect during Stage 4 demonstrating how the measures are implemented. A building adaptability and disassembly guide to be provided by Principal Contractor / Architect. Requirements to be included in Principal Contractor's Prelims.
LAND USE AND ECOLOGY			credit weight = 1.00%							
LE 01	Credit 1	Previously occupied land	1	1				Hollaway Studio		Hollaway Studio to confirm that at least 75% of the proposed development is on previously occupied land.

	Credit 2	Contaminated land	1		1			Hilson Moran (Contamination)		A preliminary risk assessment will be provided for planning purposes. A ground investigation may be undertaken to discharge a future planning condition. This credit is being kept as potential, pending confirmation on whether any ground contamination is present and whether a remediation strategy will be required.
Pre-req. to LE02/04/05		Pre-requisite: UK and EU law compliance	-	Yes				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
Pre-req. to LE02		Pre-requisite: Assessment route	-	Route 2						
LE 02	Pre-req.	Assessment Route	-	Yes						
	Credit 1	Survey and evaluation	1	1				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
	Credit 2	Determining the Ecological outcomes for the site	1	1				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
	EXE Credit	Exemplary Performance Determine the ecological outcomes for the site (Sustainability - related activities)	1				1	-		Not targeted.
LE 03	Pre-req.	Identification and Understanding the Risks and opportunities for the site	-	Yes				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
	Credit 1	Planning, liaison, implementation and data	1	1				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
	Credit 2	Managing negative impacts on ecology	2	2				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
LE 04	Pre-req.	Managing Negative Impacts on Ecology	-	Yes				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
	Credit 2	Planning, liaison, implementation, data collation (Route 2 only)	1	1				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.

LE 05	Credit 3	Change enhancement of ecology (Route 2 only)	3	2	1		Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide an ecology report during Stage 2 for planning. 2 credits are currently targeted, which require: <i>95% and 104% habitat area retention — no net loss for the habitats assessed.</i> Further potential credits will be confirmed by the design team and ecologist at a later stage. A BREEAM-compliant report can be provided in Stage 2+ if required.
	EXE Credit	Exemplary Enhancement	1			1	Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide an ecology report during Stage 2 for planning. 2 credits are currently targeted, which require: <i>95% and 104% habitat area retention — no net loss for the habitats assessed.</i> Further potential credits will be confirmed by the design team and ecologist at a later stage. A BREEAM-compliant report can be provided in Stage 2+ if required.
	Pre-req.	Roles and Responsibilities	-	Yes			Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
	Credit 1	Planning, liaison, monitoring review, maintenance	1	1			Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
	Credit 2	Landscape and ecology management plan	1	1			Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
POLLUTION credit weight = 0.67%									
POL 01	Pre-req.	Electric compressors BS EN 378: 2016	-	Yes					
	Credit 1-2	Impact of refrigerants	2	1		1	GSE Property Group / MEP Consultant		Where the systems using refrigerants (including both new and retained systems) have Direct Effect Life Cycle CO2 equivalent emissions (DELC CO2e) of ≤ 1000 kgCO2e/kW cooling/heating capacity. Requirements to be included in the mechanical specification in later stage.
	Credit 3	Leak detection system	1			1	-		The refrigerant leak detection credit is kept as a potential credit at the current stage due to its high cost.

POL 02	Credit 1	Local air quality	2	2				GSE Property Group / MEP Consultant		Requirements to be included in the mechanical specification in later stage.
POL 03	Pre req	floor and surface water management		Yes						
	Credit 1	Flood resilience	2	1			1	EPS		The building is located in Zone 3. EPS has provided a BREEAM compliant report confirming one credit can be targeted.
	Credit 2	Surface water run-off - Rate	1	1				EPS		EPS has provided a BREEAM compliant report confirming one credit can be targeted.
	Credit 3	Surface water run-off - Volume	1	1				EPS		EPS has provided a BREEAM compliant report confirming one credit can be targeted.
	Credit 4	Minimising watercourse pollution	1	1				EPS		EPS has provided a BREEAM compliant report confirming one credit can be targeted.
POL 04	Credit 1	Reduction of night time light pollution	1	1				GSE Property Group / Lighting specialist		Requirements to be included in the lighting specification in later stage.
POL 05	Credit 1	Reduction of noise pollution	1	1				GSE Property Group / Hilson Moran (Acoustics)	Stage 2 action	The noise impact assessment will be provided for planning. Details to be reviewed by Acoustics Consultant at later stage.
AI Approved Innovation			credit weight = 1.00%							
Approved Innovation			1	0			1		-	
			Score	78.8%	89.0%	93.0%				
			Rating	Excellent	Excellent	Excellent				

Appendix C BREEAM Pre-Assessment: Golf Building

BREEAM UK New Construction V 6.1	
Project Name:	Imperial Gardens
Building Type:	Other - Assembly and leisure
Scope:	Fully Fitted
Target rating:	Excellent
Date:	22/12/2025

Targeted
Potential
Difficult
Unachievable
Mandatory credits for the targeted rating

EXE - Exemplary credit worth 1%

Credit Code		Credit Title	Credits Available	T	P	D	U	Action Lead	Stage	Comments
MANAGEMENT			credit weight =	0.52%						
MAN 01	Credit 1	Project delivery planning	1	1				GSE Property Group	Stage 2+ action	Roles and responsibilities of all project team members should be defined during Stage 2 in accordance with BREEAM requirements. Relevant documents such as Initial Project Brief, Project Execution Plan, Internal Communication Strategy, Responsibility Matrix covering all the key phases of project delivery will be required as evidence.
	Credit 2	Stakeholder consultation (interested parties)	1	1				Lichfields	Stage 2+ action	Lichfields to confirm that the third-party consultation for planning will include all BREEAM-required interested parties and the minimum consultation contents. Additional consultation will be required at Stage 2+ if any gaps are identified.
	Credit 3 Pre-req.	Performance targets formally agreed: Pre-requisite	-	Yes				GSE Property Group / Design team	Stage 2 action	BREEAM target 'Excellent' has been formally agreed during Stage 2.
	Credit 3	BREEAM Advisory Professional credit (Concept Design)	1	1				Hilson Moran (BREEAM)	Stage 2 action	BREEAM AP role should be fulfilled with pre-assessment stage input.
	Credit 4	BREEAM Advisory Professional credits (Developed Design)	1	1				GSE Property Group / BREEAM AP		BREEAM AP to be appointed during Stage 3 and Stage 4.
MAN 02	Credits 1-2	Elemental life cycle cost (LCC)	2	2				GSE Property Group / Cost Consultant	Stage 2+ action	Cost Consultant to be appointed to provide the ELCC during Stage 2+.
	Credit 3	Component level LCC Plan - Options appraisal	1	1				GSE Property Group / Cost Consultant		GMS / Cost consultant to confirm the credits - last time these credits were not targeted.
	Credit 4	Capital cost reporting	1	1				Cost Consultant		Cost Consultant to report the capital cost for the RFO works in £k/m2.
MAN 03	Pre-req.	Timber: Pre-requisite	-	Yes				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.

	Credit 1	Environmental management	1	1				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.
	Credit 2 Pre-req.	Performance targets formally agreed with contractor: Pre-requisite	-	Yes				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.
	Credit 2	BREEAM AP (site)	1	1				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.
	Credit 3-4	Responsible construction management	2	2				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.
	Credit 5&6 Pre-req.	Monitoring of construction site impacts: Pre-requisite	-	Yes				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.
	Credit 5	Utility consumption - Energy and Water	1	1				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.
	Credit 6	Transport of construction materials and waste	1	1				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.
	EXE Credit	Responsible construction management - Exemplary level	1	1				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.
MAN 04	Credit 1	Commissioning testing schedule and responsibilities	1	1				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims. During the design stage, the client or the principal contractor appoints the specialist commissioning manager.
	Credit 2	Commissioning design and preparation	1	1				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.During the design stage, the client or the principal contractor appoints the specialist commissioning manager.
	Credit 3	Testing and inspecting building fabric	1	1				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.
	Credit 4	Handover - Building User Guide and Training	1	1				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.
MAN 05	Credit 1	Aftercare support	1	1				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.
	Credit 2	Commissioning implementation (seasonal)	1	1				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.
	Credit 3	Post occupancy evaluation	1	1				GSE Property Group / Hythe Imperial Hotel		GSE / Hythe Imperial Hotel to appoint an independent party to carry out a POE exercise one year after the building is substantially occupied.
HEALTH & WELLBEING			credit weight =	0.82%						
HEA 01	Credit 1	Control of glare from sunlight	1	1				GSE Property Group / Architect		A glare control strategy should be implemented to design out the potential for glare in any 'relevant building area' as defined in BREEAM scheme.
	Credit 2	Daylighting	1				1	-		Not targeted.
	Credit 3	View out	1	1				Architect		95% of the floor area in 95% of spaces for each relevant building area should provide an adequate view out.
	Credit 4	Internal and external lighting levels, zoning and control	1	1				GSE Property Group / Lighting specialist		Requirements to be included in the lighting specification in later stage.

	EXE Credit	Daylighting - Exemplary level	1				1	-		Not targeted.
	EXE Credit	Internal and external lighting levels - Exemplary level	1				1	-		Not targeted.
HEA 02	Pre-req.	Indoor air quality plan: Pre-requisite	-	Yes				GSE Property Group / Air Quality Consultant		IAQP to be produced in design stage and implemented.
	Credit 2	Ventilation	1				1	-		Not targeted.
	Credit 3	Emissions from construction products VOC (products specifications)	2	1	1			GSE Property Group / Architect		Requirements of low VOCs to be included in the products specification in later stage. Refer to GN22.
	Credit 4	Post Construction Indoor Air Quality Measurement	1		1			GSE Property Group		Currently this one credit is kept as potential.
	EXE Credit	Exemplary performance for VOC (products specs)	1				1	-		Not targeted.
HEA 04	Credit 1	Thermal modelling	1	1				GSE Property Group / Energy Assessor	Stage 2+ action	Thermal comfort modelling is to be undertaken during Stage 2+ (as required by Ene 04). A BREEAM-compliant report can be provided at a later stage if required.
	Credit 2	Design for future thermal comfort	1	1				GSE Property Group / Energy Assessor		Thermal comfort modelling is to be undertaken during design stage. A BREEAM-compliant report can be provided at a later stage if required.
	Credit 3	Thermal zoning and controls	1	1				GSE Property Group / MEP Consultant		Requirements to be included in the mechanical specification in later stage.
HEA 05	Credit 1	Acoustic performance for Residential institutions	3	3				GSE Property Group / Acoustics Consultant		Requirements to be reviewed in later stage.
HEA 06	Credit 1	Security of site and building	1	1				GSE Property Group / Security Assessor	Stage 2+ action	A suitably qualified security specialist consultant to be appointed to undertake a Security Needs Assessment during Stage 2+. The controls and recommendations shall be incorporated into proposals and implemented in the as-built development. Any deviation from those controls and recommendations shall be justified and agreed with the SQSS.
	EXE credit	Security	1				1	-		Not targeted.
HEA 07	Credit 1	Safe access	1	1				Mackenzie & Ebert / Hollaway Studio		Mackenzie & Ebert and Hollaway Studio is to ensure that safe access is provided in compliance with the relevant BREEAM requirements.
	Credit 2	Outside space	1	1				Mackenzie & Ebert		Mackenzie & Ebert is to ensure that outside space is provided in compliance with the relevant BREEAM requirements.
ENERGY			credit weight =	0.76%						
ENE 01	Credit 1 to 9	Energy performance	9		1	1	7	GSE Property Group / Energy Assessor		Credits to be confirmed in later stage.
	Credit 10-13	Prediction of operational energy consumption	4	4				GSE Property Group / Energy Assessor		Prediction of operational energy consumption modelling to be undertaken in the design stage.

	EXE Credit	Beyond zero net regulated carbon / Carbon negative	5				5	-		Not targeted.
	EXE Credit	Post-occupancy stage	2				2	-		Not targeted.
ENE 02	Credit 1	Sub-metering of end-use categories	1	1				GSE Property Group / MEP Consultant		Requirements to be included in the electrical specification in later stage.
	Credit 2	Sub-metering of high energy load and tenancy areas	1	1				GSE Property Group / MEP Consultant		Requirements to be included in the electrical specification in later stage.
ENE 03	Credit 1	External Lighting	1	1				GSE Property Group / Lighting specialist		Requirements to be included in the lighting specification in later stage.
	Credit 1	Passive design (<i>Hea 04 should be achieved</i>)	1	1				GSE Property Group / Energy Assessor	Stage 2+ action	Passive design analysis to be undertaken during Stage 2+.
ENE 04	Credit 2	Free Cooling (<i>Credit 1 Passive design must be achieved</i>)	1				1	-		Not targeted.
	Credit 3	Low zero carbon (LZC) feasibility study	1	1				GSE Property Group / Energy Assessor	Stage 2+ action	Energy strategy will be provided in Stage 2 for planning. BREEAM compliant LZC report can be provided in Stage 2+ if required.
ENE 08	Credit 1	Energy efficient equipment	2	2				GSE Property Group / Hythe Imperial Hotel		Identify the building's unregulated energy consuming loads and demonstrate a meaningful reduction in the total annual unregulated energy consumption of the building. Further details refer to Table 6.7 in the BREEAM Scheme. (i.e., laundry, fridges...)
TRANSPORT			credit weight =	0.83%						
TRA 01	Credit 1 & 2	Transport assessment and travel plan	2	2				DHA Transport	Stage 2+ action	Transport Assessment and travel plan should be provided in Stage 2+ to meet all BREEAM requirements.
TRA 02	Pre req Credit 1-10	Travel Assessment	-	Yes						As AI>8, 6 points required to get 10 credits below
TRA 02	Credit 1 to 10	Sustainable transport measures - details below (Tra 01 credits must be achieved)	10	6	4					DHA Transport has confirmed that the existing AI is 6.78 using the Tra 01 Calculator.
	Measure 1	Public transport location AI ≥ 8	-	No				-		DHA Transport has confirmed that the existing AI is 6.78 using the Tra 01 Calculator.
	Measure 2	Increase of the existing local transport services	-	No				-		Not targeted as confirmed by DHA.
	Measure 3	Provide a public transport information system	-	No				-		Not targeted as confirmed by DHA.
	Measure 4	Provide electric cars recharging stations	-	Yes				DHA Transport		DHA Transport to confirm whether provision of EV points meets relevant BREEAM requirements or not.
	Measure 5	Set up a car sharing facility	-	TBC				GSE Property Group / DHA Transport		Kept as potential as confirmed by DHA. Can be reviewed at a later stage following the development of the travel plan.
	Measure 6	Implement a measure chosen with the local authority	-	Yes				Lichfields / DHA Transport	Stage 2 action	DHA Transport has confirmed that these two points can be targeted. Consultation has been undertaken since Stage 1.
	Measure 7	Install compliant cycle storage spaces	-	Yes				DHA Transport / Mackenzie & Ebert		BREEAM requirements: 1 space per 10 staff (Building Type A - use office buildings criteria. The unit of measure for visitors or beds does not apply to hotels) 50% reduction can be applied if the existing AI > 8. DHA Transport and Hollaway Studio to confirm the above.

	Measure 8	Provide at least 2 compliant cyclists facilities	-	Yes				DHA Transport / Mackenzie & Ebert		At least two types of cyclist facilities are required - i.e., lockers, showers, changing spaces, drying spaces. DHA Transport and Hollaway Studio to confirm the above.
	Measure 9	At least three existing accessible amenities are present	-	Yes				DHA Transport		An appropriate food outlet, access to an outdoor open space, and access to a recreation or leisure facility for fitness or sports are available within 500 m. DHA will report these in the BREEAM-compliant transport assessment.
	Measure 10	Provide 1 or 2 new accessible amenities	-	Yes				Architect		Outdoor pool and gym provided on GF can be considered as 1 new amenity, as per KBCN1406.
	Measure 11	Implement 1 site-specific improvement measure	-	TBC				-		Any site site-specific improvement measure, not covered by the options already listed in this issue in line with the recommendations of the travel plan, can be discussed in later stage if required.
WATER			credit weight =	0.78%						
WAT 01	Credit 1 to 5	Water consumption	5	3	1		1	GSE Property Group / MEP Consultant / Architect		Design team to specify the new domestic water-consuming components with lower flow rates, to ensure min. of 40% improvement over BREEAM baseline achieved. Requirements to be included in the Sanitaryware schedule and the mechanical specification.
	EXE Credit	Water consumption	1				1	-		Not targeted.
WAT 02	Credit 1	Water Sub-metering	1	1				GSE Property Group / MEP Consultant		Requirements to be included in the mechanical specification in later stage.
WAT 03	Credit 1	Leak detection system	1	1				GSE Property Group / MEP Consultant		Requirements to be included in the mechanical specification in later stage.
	Credit 2	Flow control devices	1	1				GSE Property Group / MEP Consultant		Requirements to be included in the mechanical specification in later stage.
WAT 04	Credit 1	Water efficient equipment	1				1	-		Swimming pool and irrigation have been identified as sources of unregulated water consumption. The specialist should identify any measures to reduce unregulated water use at later stage.
MATERIALS			credit weight =	1.07%						
MAT 01	Credit 1 to 6	Life cycle impacts - Superstructure	6	6				GSE Property Group / Hilson Moran (LCA) / Hollaway Studio	Stage 2 action	Life cycle assessment (LCA) has been undertaken prior to Planning. Please note LCA is also required to be undertaken during Stage 4.
	Credit 7	Life cycle impacts - Substructure and hard landscaping	1	1				GSE Property Group / Hilson Moran (LCA) / Hollaway Studio / Lloyd Bore	Stage 2 action	Life cycle assessment (LCA) has been undertaken prior to Planning.
	EXE Credit	Core building services	1				1	-		Not targeted.
	EXE Credit	LCA and LCC alignment	1				1	-		Not targeted.
	EXE Credit	Third party verification	1		1			GSE Property Group / Third Party Verifier		Currently keep as potential - can be undertaken in later stage if required.
MAT 02	Credit 1	Environmental impacts construction products – EPD	1	1				GSE Property Group / Design Team		Specify construction products with EPD that achieve a total EPD points score of at least 20 following relevant BREEAM requirements.
MAT 03	Pre-req.	Legally harvested and traded timber: Pre-requisite	-	Yes				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.

	Credit 1	Enabling Sustainable procurement plan	1	1				Principal Contractor / GSE Property Group / Cost Consultant	Stage 2+ action	Sustainable procurement plan to be provided in Stage 2+.
	Credits 2 to 4	Measuring Responsible sourcing of materials	3	1	1		1	Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims.
	EXE Credit	Exemplary Performance for Responsible Sourcing	1				1	-		Not targeted.
MAT 05	Credit 1	Protecting vulnerable parts of the building from damage & Protecting exposed parts of the building from material degradation	1	1				GSE Property Group / Architect		Architect to consider 'protecting vulnerable parts of the building from damage' and 'protecting exposed parts of the building from material degradation'. Relevant BREEAM requirements should be followed.
MAT 06	Credit 1	Material efficiency	1	1				Hilson Moran (CE) / Principal Contractor / GSE Property Group / Cost Consultant	Stage 2 action	Materials efficiency opportunities should be identified and documented during Stage 2. Updates to be provided for each stage. Stage 1 action has been covered by the circular economy statement. Requirements to be included in Principal Contractor's Prelims.
WASTE			credit weight =	0.60%						
WST 01	Credit 1	Pre-demolition audit	1	1				GSE Property Group / Demolition Contractor	Stage 2+ action	A pre-demolition audit to be undertaken prior to any strip-out or demolition works on-site.
	Credit 2	Construction resource efficiency	3	1	1		1	Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims. Construction waste generated per 100m2 (GIA) cannot be higher than 13.3 m3 OR 11.1 tonnes.
	Credit 3	Diversion of resources from landfill	1	1				Principal Contractor / GSE Property Group / Cost Consultant		Requirements to be included in Principal Contractor's Prelims. Percentages of non-hazardous construction and demolition waste generated have been diverted from landfill: - Non-demolition: min. 70% (volume) OR 80% (tonnage) - Demolition: min. 80% (volume) OR 90% (tonnage)
	EXE credit	Exemplary Performance for Construction Waste Management	1				1	-		Not targeted.
WST 02	Pre-req.	Project sustainable aggregate points		No				-		Not targeted.
	Credit 1	Project sustainable aggregate points	1				1	-		Not targeted.
	EXE Credit	Exemplary Performance for Recycled Aggregates	1				1	-		Not targeted.
WST 03	Credit 1	Operational waste	1	1				GSE Property Group / Architect		A dedicated space should be provided for operational waste generated following relevant BREEAM requirements.
WST 05	Credit 1	Adaptation to climate change - Structural and fabric resilience	1	1				GSE Property Group / Sustainability Consultant	Stage 2+ action	Study required during Stage 2+ to identify risks to the building from climate change and identification of measures to mitigate these risks.

	EXE Credit	Exemplary Performance Responding to Climate	1			1		-		Wst 05 exemplary credit can be targeted once the following requirements targeted: Hea 04 - Criterion 6 Ene 01 - min. of 6 credits Ene 04 - The passive design analysis credit Wat 01 - min. of 3 credits Mat 05 - Criteria 2~4 Pol 03 - 1 credit for flood resilience PLUS 2 credits for surface water run-off.
WST 06	Credit 1	Design for disassembly and functional adaptability - recommendations	1	1				GSE Property Group / Architect	Stage 2+ action	Architect to provide the BREEAM compliant report during Stage 2+.
	Credit 2	Design for disassembly and functional adaptability - implementation	1	1				Architect / Principal Contractor / GSE Property Group / Cost Consultant		Updates to be provided by Architect during Stage 4 demonstrating how the measures are implemented. A building adaptability and disassembly guide to be provided by Principal Contractor / Architect. Requirements to be included in Principal Contractor's Prelims.
LAND USE AND ECOLOGY			credit weight =	1.00%						
LE 01	Credit 1	Previously occupied land	1	1				Hollaway Studio		Hollaway Studio to confirm that at least 75% of the proposed development is on previously occupied land.
	Credit 2	Contaminated land	1		1			Hilson Moran (Contamination)		A preliminary risk assessment will be provided for planning purposes. A ground investigation may be undertaken to discharge a future planning condition. This credit is being kept as potential, pending confirmation on whether any ground contamination is present and whether a remediation strategy will be required.
Pre-req. to LE02/04/05		Pre-requisite: UK and EU law compliance	-	Yes				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
Pre-req. to LE02		Pre-requisite: Assessment route	-	Route 2						
LE 02	Pre-req.	Assessment Route	-	Yes						
	Credit 1	Survey and evaluation	1	1				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
	Credit 2	Determining the Ecological outcomes for the site	1	1				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.

	EXE Credit	Exemplary Performance Determine the ecological outcomes for the site (Sustainability - related activities)	1				1	-		Not targeted.
LE 03	Pre-req.	Identification and Understanding the Risks and opportunities for the site	-	Yes				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
	Credit 1	Planning, liaison, implementation and data	1	1				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
	Credit 2	Managing negative impacts on ecology	2	2				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
LE 04	Pre-req.	Managing Negative Impacts on Ecology	-	Yes				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
	Credit 2	Planning, liaison, implementation, data collation (Route 2 only)	1	1				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
	Credit 3	Change enhancement of ecology (Route 2 only)	3	2	1			Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide an ecology report during Stage 2 for planning. 2 credits are currently targeted, which require: <i>95% and 104% habitat area retention — no net loss for the habitats assessed.</i> Further potential credits will be confirmed by the design team and ecologist at a later stage. A BREEAM-compliant report can be provided in Stage 2+ if required.
	EXE Credit	Exemplary Enhancement	1				1	Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide an ecology report during Stage 2 for planning. 2 credits are currently targeted, which require: <i>95% and 104% habitat area retention — no net loss for the habitats assessed.</i> Further potential credits will be confirmed by the design team and ecologist at a later stage. A BREEAM-compliant report can be provided in Stage 2+ if required.
LE 05	Pre-req.	Roles and Responsibilities	-	Yes				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.

	Credit 1	Planning, liaison, monitoring review, maintenance	1	1				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
	Credit 2	Landscape and ecology management plan	1	1				Lloyd Bore	Stage 2 action	Ecologist to undertake the ecology survey and provide ecology report during Stage 2 for planning. BREEAM compliant report can be provided in Stage 2+ if required.
POLLUTION			credit weight =	0.67%						
POL 01	Pre-req.	Electric compressors BS EN 378: 2016	-	Yes						
	Credit 1-2	Impact of refrigerants	2	1		1		GSE Property Group / MEP Consultant		Where the systems using refrigerants (including both new and retained systems) have Direct Effect Life Cycle CO2 equivalent emissions (DELC CO2e) of ≤ 1000 kgCO2e/kW cooling/heating capacity. Requirements to be included in the mechanical specification in later stage.
	Credit 3	Leak detection system	1			1		-		The refrigerant leak detection credit is kept as a potential credit at the current stage due to its high cost.
POL 02	Credit 1	Local air quality	2	2				GSE Property Group / MEP Consultant		Requirements to be included in the mechanical specification in later stage.
POL 03	Pre req	floor and surface water management		Yes						
	Credit 1	Flood resilience	2	1			1	EPS		The building is located in Zone 3. EPS has provided a BREEAM compliant report confirming one credit can be targeted.
	Credit 2	Surface water run-off - Rate	1	1				EPS		EPS has provided a BREEAM compliant report confirming one credit can be targeted.
	Credit 3	Surface water run-off - Volume	1	1				EPS		EPS has provided a BREEAM compliant report confirming one credit can be targeted.
	Credit 4	Minimising watercourse pollution	1	1				EPS		EPS has provided a BREEAM compliant report confirming one credit can be targeted.
POL 04	Credit 1	Reduction of nighttime light pollution	1	1				GSE Property Group / Lighting specialist		Requirements to be included in the lighting specification in later stage.
POL 05	Credit 1	Reduction of noise pollution	1	1				GSE Property Group / Hilson Moran (Acoustics)	Stage 2 action	The noise impact assessment will be provided for planning. Details to be reviewed by Acoustics Consultant at later stage.
AI Approved Innovation			credit weight =	1.00%						
Approved Innovation			1	0			1		-	
				Score	78.8%	89.2%	93.2%			

Rating	Excellent	Excellent	Excellent
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Appendix D BRUKL Output Document – with Energy Efficiency and Low Carbon Heating Improvements

Project name

Hythe Imperial Hotel and Hythe Golf Club

As designed

Date: Mon Jan 12 15:39:15 2026

Administrative information

Building Details

Address: Golf Building - Hythe Imperial Hotel and Hythe Golf Club, Princess Parade, Hythe, Kent, CT21 6AE

Certifier details

Name:

Telephone number:

Address: , ,

Certification tool

Calculation engine: TAS

Calculation engine version: "v9.5.7"

Interface to calculation engine: TAS

Interface to calculation engine version: v9.5.7

BRUKL compliance module version: v6.1.e.1

Foundation area [m²]: 533.33The CO₂ emission and primary energy rates of the building must not exceed the targets

The building does not comply with England Building Regulations Part L 2021

Target CO ₂ emission rate (TER), kgCO ₂ /m ² .annum	8.65
Building CO ₂ emission rate (BER), kgCO ₂ /m ² .annum	10.48
Target primary energy rate (TPER), kWh _{PE} /m ² .annum	92.59
Building primary energy rate (BPER), kWh _{PE} /m ² .annum	113.67
Do the building's emission and primary energy rates exceed the targets?	BER > TER BPER > TPER

The performance of the building fabric and fixed building services should achieve reasonable overall standards of energy efficiency

Fabric element	U _{a-Limit}	U _{a-Calc}	U _{i-Calc}	First surface with maximum value
Walls*	0.26	0.18	0.18	External Wall_golfclub 0.4
Floors	0.18	0.15	0.15	Ground Floor
Pitched roofs	0.16	-	-	No pitched roofs in project
Flat roofs	0.18	0.18	0.18	Roof
Windows** and roof windows	1.6	1.14	1.93	GL_Golf_roof_0.125
Rooflights***	2.2	-	-	No rooflights in project
Personnel doors^	1.6	-	-	No personnel doors in project
Vehicle access & similar large doors	1.3	-	-	No vehicle access or similar large doors in project
High usage entrance doors	3	-	-	No high usage entrance doors in project

U_{a-Limit} = Limiting area-weighted average U-values [W/(m²K)]U_{i-Calc} = Calculated maximum individual element U-values [W/(m²K)]U_{a-Calc} = Calculated area-weighted average U-values [W/(m²K)]

* Automatic U-value check by the tool does not apply to curtain walls whose limiting standard is similar to that for windows.

** Display windows and similar glazing are excluded from the U-value check. *** Values for rooflights refer to the horizontal position.

^ For fire doors, limiting U-value is 1.8 W/m²K

NB: Neither roof ventilators (inc. smoke vents) nor swimming pool basins are modelled or checked against the limiting standards by the tool.

Air permeability	Limiting standard	This building
m ³ /(h.m ²) at 50 Pa	8	3

Building services

For details on the standard values listed below, system-specific guidance, and additional regulatory requirements, refer to the Approved Documents.

Whole building lighting automatic monitoring & targeting with alarms for out-of-range values	YES
Whole building electric power factor achieved by power factor correction	>0.95

1- Main Space (8 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	6	-	-	0.85
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

2- Changing (4 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	-	1.5	0.7
Standard value	N/A	N/A	N/A	1.5^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
^ Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.					

3- Kitchen

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	-	-	-	-
Standard value	2.5*	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

4- WC and Shower

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	-	-	-
Standard value	N/A	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES

1- DHW

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	3.2	0
Standard value	2*	N/A
* Standard shown is for all types except absorption and gas engine heat pumps.		

Zone-level mechanical ventilation, exhaust, and terminal units

ID	System type in the Approved Documents
A	Local supply or extract ventilation units
B	Zonal supply system where the fan is remote from the zone
C	Zonal extract system where the fan is remote from the zone
D	Zonal balanced supply and extract ventilation system
E	Local balanced supply and extract ventilation units
F	Other local ventilation units
G	Fan assisted terminal variable air volume units
H	Fan coil units
I	Kitchen extract with the fan remote from the zone and a grease filter
NB: Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.	

Zone name	SFP [W/(l/s)]										HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I			
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1	Zone	Standard	
Golf_CH_GF_1	-	-	-	-	-	1.5	-	-	-	-	N/A	
Golf_CH_GF_2	-	-	-	-	-	1.5	-	-	-	-	N/A	
Golf_CH_GF_3	-	-	-	-	-	1.5	-	-	-	-	N/A	
Golf_VirtualGolf_GF 1	-	-	-	-	1.7	-	-	-	-	-	N/A	
Golf_VirtualGolf_GF 2	-	-	-	-	1.7	-	-	-	-	-	N/A	
Golf_VirtualGolf_GF 3	-	-	-	-	1.7	-	-	-	-	-	N/A	
Golf_VirtualGolf_GF 4	-	-	-	-	1.7	-	-	-	-	-	N/A	
Golf_EL_GF_1	-	-	-	-	1.7	-	-	-	-	-	N/A	
Golf_CH_External_2	-	-	-	-	-	1.5	-	-	-	-	N/A	
Golf_RC_1	-	-	-	-	1.7	-	-	-	-	-	N/A	
Golf_EL_GF_2	-	-	-	-	1.7	-	-	-	-	-	N/A	
Golf_OF_1	-	-	-	-	1.7	-	-	-	-	-	N/A	

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
	Standard value	95	80	0.3
Golf_WC_GF_1		-	-	-
Golf_WC_GF_2		-	-	-
Golf_WC_GF_3		-	-	-
Golf_WC_GF_4		-	-	-
Golf_SH_GF_1		-	-	-
Golf_SH_GF_2		-	-	-
Golf_SH_GF_3		-	-	-
Golf_SH_GF_4		-	-	-
Golf_AccWC_GF 1		-	-	-
Golf_CH_GF_1		-	-	-
Golf_CH_GF_2		-	-	-
Golf_CH_GF_3		-	-	-
Golf_VirtualGolf_GF 1		-	-	-
Golf_VirtualGolf_GF 2		-	-	-
Golf_VirtualGolf_GF 3		-	-	-
Golf_VirtualGolf_GF 4		-	-	-
Golf_EL_GF_1		-	-	-
Golf_WC_External_1		-	-	-
Golf_WC_External_2		-	-	-
Golf_WC_External_3		-	-	-
Golf_CH_External_2		-	-	-
Golf_SH_External_1 1		-	-	-
Golf_CB_GF_1		-	-	-
Golf_CB_GF_2		-	-	-
Golf_CB_GF_3		-	-	-
Golf_WCC_External_1		-	-	-
Golf_WCC_External_2		-	-	-

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
	Standard value	95	80	0.3
Golf_AccWC_External_1		-	-	-
Golf_CO_GF_2		-	-	-
Golf_CO_GF_3		-	-	-
Golf_RC_1		-	95	-
Golf_EL_GF_2		-	95	-
Golf_OF_1		-	-	-
Golf_SR_1		-	-	-
Golf_KI_GF_1		-	-	-

The spaces in the building should have appropriate passive control measures to limit solar gains in summer

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Golf_VirtualGolf_GF 1	NO (-89%)	NO
Golf_VirtualGolf_GF 2	NO (-84%)	NO
Golf_VirtualGolf_GF 3	NO (-80%)	NO
Golf_VirtualGolf_GF 4	NO (-84%)	NO
Golf_EL_GF_1	NO (-45%)	NO
Golf_RC_1	NO (-86%)	NO
Golf_EL_GF_2	NO (-25%)	NO
Golf_OF_1	NO (-73%)	NO

Regulation 25A: Consideration of high efficiency alternative energy systems

Were alternative energy systems considered and analysed as part of the design process?	YES
Is evidence of such assessment available as a separate submission?	YES
Are any such measures included in the proposed design?	YES

Technical Data Sheet (Actual vs. Notional Building)

Building Global Parameters

	Actual	Notional
Floor area [m ²]	579	579
External area [m ²]	1628	1628
Weather	LON	LON
Infiltration [m ³ /hm ² @ 50Pa]	3	3
Average conductance [W/K]	375	436
Average U-value [W/m ² K]	0.23	0.27
Alpha value* [%]	25.37	10.37

* Percentage of the building's average heat transfer coefficient which is due to thermal bridging

Building Use

% Area Building Type

Retail/Financial and Professional Services
 Restaurants and Cafes/Drinking Establishments/Takeaways
 Offices and Workshop Businesses
 General Industrial and Special Industrial Groups
 Storage or Distribution
 Hotels
 Residential Institutions: Hospitals and Care Homes
 Residential Institutions: Residential Schools
 Residential Institutions: Universities and Colleges
 Secure Residential Institutions
 Residential Spaces
 Non-residential Institutions: Community/Day Centre
 Non-residential Institutions: Libraries, Museums, and Galleries
 Non-residential Institutions: Education
 Non-residential Institutions: Primary Health Care Building
 Non-residential Institutions: Crown and County Courts
100 General Assembly and Leisure, Night Clubs, and Theatres
 Others: Passenger Terminals
 Others: Emergency Services
 Others: Miscellaneous 24hr Activities
 Others: Car Parks 24 hrs
 Others: Stand Alone Utility Block

Energy Consumption by End Use [kWh/m²]

	Actual	Notional
Heating	7.51	6.81
Cooling	1.97	3.65
Auxiliary	11.87	9.54
Lighting	11.84	9.43
Hot water	43.64	51.59
Equipment*	71.15	71.15
TOTAL**	76.83	81.03

* Energy used by equipment does not count towards the total for consumption or calculating emissions.

** Total is net of any electrical energy displaced by CHP generators, if applicable.

Energy Production by Technology [kWh/m²]

	Actual	Notional
Photovoltaic systems	0	18.44
Wind turbines	0	0
CHP generators	0	0
Solar thermal systems	0	0
<i>Displaced electricity</i>	<i>0</i>	<i>18.44</i>

Energy & CO₂ Emissions Summary

	Actual	Notional
Heating + cooling demand [MJ/m ²]	92.02	106.6
Primary energy [kWh _{PE} /m ²]	113.67	92.59
Total emissions [kg/m ²]	10.48	8.65

HVAC Systems Performance										
System Type	Heat dem MJ/m2	Cool dem MJ/m2	Heat con kWh/m2	Cool con kWh/m2	Aux con kWh/m2	Heat SSEFF	Cool SSEER	Heat gen SEFF	Cool gen SEER	
[ST] No Heating or Cooling										
Actual	0	0	0	0	0	0	0	0	0	
Notional	0	0	0	0	0	0	0	----	----	
[ST] No Heating or Cooling										
Actual	0	0	0	0	0	0	0	0	0	
Notional	0	0	0	0	0	0	0	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	35.7	67.8	2.4	3.1	7.4	4.2	6	4.2	6	
Notional	32.4	91.9	3.4	5.8	4.2	2.65	4.4	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	60.1	0	16.7	0	11.7	1	0	1	0	
Notional	57.8	0	12	0	8.3	1.34	0	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	16.2	0	1.1	0	0	4.2	0	4.2	0	
Notional	16	0	1.7	0	0	2.64	0	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	190.1	0	52.8	0	0	1	0	1	0	
Notional	186.8	0	38.7	0	0	1.34	0	----	----	

Key to terms

Heat dem [MJ/m2]	= Heating energy demand
Cool dem [MJ/m2]	= Cooling energy demand
Heat con [kWh/m2]	= Heating energy consumption
Cool con [kWh/m2]	= Cooling energy consumption
Aux con [kWh/m2]	= Auxiliary energy consumption
Heat SSEFF	= Heating system seasonal efficiency (for notional building, value depends on activity glazing class)
Cool SSEER	= Cooling system seasonal energy efficiency ratio
Heat gen SSEFF	= Heating generator seasonal efficiency
Cool gen SSEER	= Cooling generator seasonal energy efficiency ratio
ST	= System type
HS	= Heat source
HFT	= Heating fuel type
CFT	= Cooling fuel type

Project name

Hythe Imperial Hotel and Hythe Golf Club As designed

Date: Tue Feb 03 12:06:30 2026

Administrative information

Building Details

Address: Spa and Hotel Extension - Hythe Imperial Hotel,
Princess Parade, Hythe, Kent, CT21 6AE

Certifier details

Name:

Telephone number:

Address: , ,

Certification tool

Calculation engine: TAS

Calculation engine version: "v9.5.7"

Interface to calculation engine: TAS

Interface to calculation engine version: v9.5.7

BRUKL compliance module version: v6.1.e.1

Foundation area [m²]: 363.65The CO₂ emission and primary energy rates of the building must not exceed the targets

Target CO ₂ emission rate (TER), kgCO ₂ /m ² .annum	18.32
Building CO ₂ emission rate (BER), kgCO ₂ /m ² .annum	17.22
Target primary energy rate (TPER), kWh _{PE} /m ² .annum	199.28
Building primary energy rate (BPER), kWh _{PE} /m ² .annum	187.3
Do the building's emission and primary energy rates exceed the targets?	BER ≤ TER BPER ≤ TPER

The performance of the building fabric and fixed building services should achieve reasonable overall standards of energy efficiency

Fabric element	U _{a-Limit}	U _{a-Calc}	U _{i-Calc}	First surface with maximum value
Walls*	0.26	0.18	0.18	External Wall_Hythe
Floors	0.18	0.15	0.15	Ground Floor H&S
Pitched roofs	0.16	-	-	No pitched roofs in project
Flat roofs	0.18	0.17	0.18	Roof
Windows** and roof windows	1.6	1.2	1.83	GL_Hotel and Spa_GF_W_0.60 top
Rooflights***	2.2	-	-	No rooflights in project
Personnel doors^	1.6	-	-	No personnel doors in project
Vehicle access & similar large doors	1.3	-	-	No vehicle access or similar large doors in project
High usage entrance doors	3	-	-	No high usage entrance doors in project
U _{a-Limit} = Limiting area-weighted average U-values [W/(m ² K)] U _{a-Calc} = Calculated area-weighted average U-values [W/(m ² K)] U _{i-Calc} = Calculated maximum individual element U-values [W/(m ² K)] * Automatic U-value check by the tool does not apply to curtain walls whose limiting standard is similar to that for windows. ** Display windows and similar glazing are excluded from the U-value check. *** Values for rooflights refer to the horizontal position. ^ For fire doors, limiting U-value is 1.8 W/m ² K NB: Neither roof ventilators (inc. smoke vents) nor swimming pool basins are modelled or checked against the limiting standards by the tool.				

Air permeability	Limiting standard	This building
m ³ /(h.m ²) at 50 Pa	8	3

Building services

For details on the standard values listed below, system-specific guidance, and additional regulatory requirements, refer to the Approved Documents.

Whole building lighting automatic monitoring & targeting with alarms for out-of-range values	YES
Whole building electric power factor achieved by power factor correction	>0.95

1- Office (Spa_OF_GF_1)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	6	-	-	0.7
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

2- Reception (Spa_RC_GF_1)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	0	6	-	1.7	0.7
Standard value	N/A	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES

3- Treatment (10 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	0	6	-	1.7	0.7
Standard value	N/A	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES

4- Bedrooms (32 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	6	-	1.7	0.7
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

5- Changing (2 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	-	-	1.7	0.7
Standard value	N/A	N/A	N/A	1.5^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
^ Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.					

6- Lounge (Spa_Lounge_GF_1)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	0	6	-	-	0.7
Standard value	N/A	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES

7- WC and Shower

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	-	-	-
Standard value	N/A	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES

1- DHW

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	3.2	0
Standard value	2*	N/A

* Standard shown is for all types except absorption and gas engine heat pumps.

Zone-level mechanical ventilation, exhaust, and terminal units

ID	System type in the Approved Documents
A	Local supply or extract ventilation units
B	Zonal supply system where the fan is remote from the zone
C	Zonal extract system where the fan is remote from the zone
D	Zonal balanced supply and extract ventilation system
E	Local balanced supply and extract ventilation units
F	Other local ventilation units
G	Fan assisted terminal variable air volume units
H	Fan coil units
I	Kitchen extract with the fan remote from the zone and a grease filter

NB: Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.

Zone name	SFP [W/(l/s)]										HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I			
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1		Zone	Standard
Spa_TreatmentRm_GF_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_2	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_3	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_4	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_5	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_6	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_7	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_8	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_9	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_10	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_Lounge_GF_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_CH_GF_1	-	-	-	-	-	1.7	-	-	-	-	-	N/A
Spa_CH_GF_2	-	-	-	-	-	1.7	-	-	-	-	-	N/A
Spa_RC_GF_1	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_1	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_2	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_3	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_4	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_5	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_6	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_7	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_8	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_9	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_10	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_11	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_12	-	-	-	-	1.7	-	-	-	-	-	-	N/A

Zone name	SFP [W/(l/s)]										HR efficiency	
	ID of system type	A	B	C	D	E	F	G	H	I		
	Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1	Zone	Standard
Hotel_BD_L02_1		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_2		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_3		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_4		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_5		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_6		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_7		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_8		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_9		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_10		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_11		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_12		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_1		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_2		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_3		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_4		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_5		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_6		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_7		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_8		-	-	-	-	1.7	-	-	-	-	-	N/A
Spa_OF_GF_1		-	-	-	-	1.7	-	-	-	-	-	N/A

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
Standard value		95	80	0.3
Spa_TreatmentRm_GF_1		110	-	-
Spa_TreatmentRm_GF_2		110	-	-
Spa_TreatmentRm_GF_3		110	-	-
Spa_TreatmentRm_GF_4		110	-	-
Spa_TreatmentRm_GF_5		110	-	-
Spa_TreatmentRm_GF_6		110	-	-
Spa_TreatmentRm_GF_7		110	-	-
Spa_TreatmentRm_GF_8		110	-	-
Spa_TreatmentRm_GF_9		110	-	-
Spa_TreatmentRm_GF_10		110	-	-
Spa_Lounge_GF_1		110	-	-
Spa_CH_GF_1		110	-	-
Spa_CH_GF_2		110	-	-
Spa_SH_GF_1		110	-	-
Spa_SH_GF_2		110	-	-
Spa_RC_GF_1		110	95	-
Spa_WC_GF_1		110	-	-
Spa_WC_GF_2		110	-	-

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
	Standard value	95	80	0.3
Spa_AccWC_GF_1		110	-	-
Spa_CO_GF_1		110	-	-
ST_Core1_1		110	-	-
ST_Core1_2		110	-	-
ST_Core1_3		110	-	-
ST_Core1_GF		110	-	-
ST_Core2_GF		110	-	-
ST_Core2_L01		110	-	-
ST_Core2_L02		110	-	-
ST_Core2_L03		110	-	-
Spa_CB_GF_1		110	-	-
Hotel_BD_L01_1		110	-	-
Hotel_BD_L01_2		110	-	-
Hotel_BD_L01_3		110	-	-
Hotel_BD_L01_4		110	-	-
Hotel_BD_L01_5		110	-	-
Hotel_BD_L01_6		110	-	-
Hotel_BD_L01_7		110	-	-
Hotel_BD_L01_8		110	-	-
Hotel_BD_L01_9		110	-	-
Hotel_BD_L01_10		110	-	-
Hotel_WC_L01_1		110	-	-
Hotel_WC_L01_2		110	-	-
Hotel_WC_L01_3		110	-	-
Hotel_WC_L01_4		110	-	-
Hotel_WC_L01_5		110	-	-
Hotel_WC_L01_6		110	-	-
Hotel_WC_L01_7		110	-	-
Hotel_WC_L01_8		110	-	-
Hotel_WC_L01_9		110	-	-
Hotel_WC_L01_10		110	-	-
Spa_CO_GF_2		110	-	-
Hotel_BD_L01_11		110	-	-
Hotel_BD_L01_12		110	-	-
Hotel_WC_L01_11		110	-	-
Hotel_WC_L01_12		110	-	-
Hotel_SH_L01_1		110	-	-
Hotel_SH_L01_2		110	-	-
Hotel_SH_L01_3		110	-	-
Hotel_SH_L01_4		110	-	-
Hotel_SH_L01_5		110	-	-
Hotel_SH_L01_6		110	-	-
Hotel_SH_L01_7		110	-	-

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
	Standard value	95	80	0.3
Hotel_SH_L01_8		110	-	-
Hotel_SH_L01_9		110	-	-
Hotel_SH_L01_10		110	-	-
Hotel_SH_L01_11		110	-	-
Hotel_SH_L01_12		110	-	-
Hotel_CO_L01_1		110	-	-
Hotel_BD_L02_1		110	-	-
Hotel_BD_L02_2		110	-	-
Hotel_BD_L02_3		110	-	-
Hotel_BD_L02_4		110	-	-
Hotel_BD_L02_5		110	-	-
Hotel_BD_L02_6		110	-	-
Hotel_BD_L02_7		110	-	-
Hotel_BD_L02_8		110	-	-
Hotel_BD_L02_9		110	-	-
Hotel_BD_L02_10		110	-	-
Hotel_BD_L02_11		110	-	-
Hotel_BD_L02_12		110	-	-
Hotel_WC_L02_1		110	-	-
Hotel_WC_L02_2		110	-	-
Hotel_WC_L02_3		110	-	-
Hotel_WC_L02_4		110	-	-
Hotel_WC_L02_5		110	-	-
Hotel_WC_L02_6		110	-	-
Hotel_WC_L02_7		110	-	-
Hotel_WC_L02_8		110	-	-
Hotel_WC_L02_9		110	-	-
Hotel_WC_L02_10		110	-	-
Hotel_WC_L02_11		110	-	-
Hotel_WC_L02_12		110	-	-
Hotel_SH_L02_1		110	-	-
Hotel_SH_L02_2		110	-	-
Hotel_SH_L02_3		110	-	-
Hotel_SH_L02_4		110	-	-
Hotel_SH_L02_5		110	-	-
Hotel_SH_L02_6		110	-	-
Hotel_SH_L02_7		110	-	-
Hotel_SH_L02_8		110	-	-
Hotel_SH_L02_9		110	-	-
Hotel_SH_L02_10		110	-	-
Hotel_SH_L02_11		110	-	-
Hotel_SH_L02_12		110	-	-
Hotel_CO_L02_1		110	-	-

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
	Standard value	95	80	0.3
Hotel_BD_L03_1		110	-	-
Hotel_BD_L03_2		110	-	-
Hotel_BD_L03_3		110	-	-
Hotel_BD_L03_4		110	-	-
Hotel_BD_L03_5		110	-	-
Hotel_BD_L03_6		110	-	-
Hotel_BD_L03_7		110	-	-
Hotel_BD_L03_8		110	-	-
Hotel_WC_L03_1		110	-	-
Hotel_WC_L03_2		110	-	-
Hotel_WC_L03_3		110	-	-
Hotel_WC_L03_4		110	-	-
Hotel_WC_L03_5		110	-	-
Hotel_WC_L03_6		110	-	-
Hotel_WC_L03_7		110	-	-
Hotel_WC_L03_8		110	-	-
Hotel_SH_L03_1		110	-	-
Hotel_SH_L03_2		110	-	-
Hotel_SH_L03_3		110	-	-
Hotel_SH_L03_4		110	-	-
Hotel_SH_L03_5		110	-	-
Hotel_SH_L03_6		110	-	-
Hotel_SH_L03_7		110	-	-
Hotel_SH_L03_8		110	-	-
Hotel_CO_L03_1		110	-	-
Spa_OF_GF_1		110	-	-

The spaces in the building should have appropriate passive control measures to limit solar gains in summer

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Spa_TreatmentRm_GF_1	NO (-73%)	NO
Spa_TreatmentRm_GF_2	NO (-72%)	NO
Spa_TreatmentRm_GF_3	NO (-72%)	NO
Spa_TreatmentRm_GF_4	NO (-73%)	NO
Spa_TreatmentRm_GF_5	N/A	N/A
Spa_TreatmentRm_GF_6	N/A	N/A
Spa_TreatmentRm_GF_7	N/A	N/A
Spa_TreatmentRm_GF_8	N/A	N/A
Spa_TreatmentRm_GF_9	NO (-93%)	NO
Spa_TreatmentRm_GF_10	N/A	N/A
Spa_Lounge_GF_1	YES (+81%)	NO
Spa_RC_GF_1	N/A	N/A
Hotel_BD_L01_1	NO (-82%)	NO
Hotel_BD_L01_2	NO (-66%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Hotel_BD_L01_3	NO (-65%)	NO
Hotel_BD_L01_4	NO (-65%)	NO
Hotel_BD_L01_5	NO (-65%)	NO
Hotel_BD_L01_6	NO (-80%)	NO
Hotel_BD_L01_7	NO (-90%)	NO
Hotel_BD_L01_8	NO (-72%)	NO
Hotel_BD_L01_9	NO (-73%)	NO
Hotel_BD_L01_10	NO (-73%)	NO
Hotel_WC_L01_1	N/A	N/A
Hotel_WC_L01_2	N/A	N/A
Hotel_WC_L01_3	N/A	N/A
Hotel_WC_L01_4	N/A	N/A
Hotel_WC_L01_5	N/A	N/A
Hotel_WC_L01_6	N/A	N/A
Hotel_WC_L01_7	N/A	N/A
Hotel_WC_L01_8	N/A	N/A
Hotel_WC_L01_9	N/A	N/A
Hotel_WC_L01_10	N/A	N/A
Hotel_BD_L01_11	NO (-73%)	NO
Hotel_BD_L01_12	NO (-74%)	NO
Hotel_WC_L01_11	N/A	N/A
Hotel_WC_L01_12	N/A	N/A
Hotel_SH_L01_1	N/A	N/A
Hotel_SH_L01_2	N/A	N/A
Hotel_SH_L01_3	N/A	N/A
Hotel_SH_L01_4	N/A	N/A
Hotel_SH_L01_5	N/A	N/A
Hotel_SH_L01_6	N/A	N/A
Hotel_SH_L01_7	N/A	N/A
Hotel_SH_L01_8	N/A	N/A
Hotel_SH_L01_9	N/A	N/A
Hotel_SH_L01_10	N/A	N/A
Hotel_SH_L01_11	N/A	N/A
Hotel_SH_L01_12	N/A	N/A
Hotel_BD_L02_1	NO (-80%)	NO
Hotel_BD_L02_2	NO (-61%)	NO
Hotel_BD_L02_3	NO (-61%)	NO
Hotel_BD_L02_4	NO (-61%)	NO
Hotel_BD_L02_5	NO (-61%)	NO
Hotel_BD_L02_6	NO (-78%)	NO
Hotel_BD_L02_7	NO (-80%)	NO
Hotel_BD_L02_8	NO (-43%)	NO
Hotel_BD_L02_9	NO (-46%)	NO
Hotel_BD_L02_10	NO (-48%)	NO
Hotel_BD_L02_11	NO (-44%)	NO
Hotel_BD_L02_12	NO (-65%)	NO
Hotel_WC_L02_1	N/A	N/A
Hotel_WC_L02_2	N/A	N/A
Hotel_WC_L02_3	N/A	N/A

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Hotel_WC_L02_4	N/A	N/A
Hotel_WC_L02_5	N/A	N/A
Hotel_WC_L02_6	N/A	N/A
Hotel_WC_L02_7	N/A	N/A
Hotel_WC_L02_8	N/A	N/A
Hotel_WC_L02_9	N/A	N/A
Hotel_WC_L02_10	N/A	N/A
Hotel_WC_L02_11	N/A	N/A
Hotel_WC_L02_12	N/A	N/A
Hotel_SH_L02_1	N/A	N/A
Hotel_SH_L02_2	N/A	N/A
Hotel_SH_L02_3	N/A	N/A
Hotel_SH_L02_4	N/A	N/A
Hotel_SH_L02_5	N/A	N/A
Hotel_SH_L02_6	N/A	N/A
Hotel_SH_L02_7	N/A	N/A
Hotel_SH_L02_8	N/A	N/A
Hotel_SH_L02_9	N/A	N/A
Hotel_SH_L02_10	N/A	N/A
Hotel_SH_L02_11	N/A	N/A
Hotel_SH_L02_12	N/A	N/A
Hotel_BD_L03_1	NO (-73%)	NO
Hotel_BD_L03_2	NO (-56%)	NO
Hotel_BD_L03_3	NO (-56%)	NO
Hotel_BD_L03_4	NO (-70%)	NO
Hotel_BD_L03_5	NO (-60%)	NO
Hotel_BD_L03_6	NO (-27%)	NO
Hotel_BD_L03_7	NO (-29%)	NO
Hotel_BD_L03_8	NO (-46%)	NO
Hotel_WC_L03_1	N/A	N/A
Hotel_WC_L03_2	N/A	N/A
Hotel_WC_L03_3	N/A	N/A
Hotel_WC_L03_4	N/A	N/A
Hotel_WC_L03_5	N/A	N/A
Hotel_WC_L03_6	N/A	N/A
Hotel_WC_L03_7	N/A	N/A
Hotel_WC_L03_8	N/A	N/A
Hotel_SH_L03_1	N/A	N/A
Hotel_SH_L03_2	N/A	N/A
Hotel_SH_L03_3	N/A	N/A
Hotel_SH_L03_4	N/A	N/A
Hotel_SH_L03_5	N/A	N/A
Hotel_SH_L03_6	N/A	N/A
Hotel_SH_L03_7	N/A	N/A
Hotel_SH_L03_8	N/A	N/A
Spa_OF_GF_1	NO (-90%)	NO

Regulation 25A: Consideration of high efficiency alternative energy systems

Were alternative energy systems considered and analysed as part of the design process?	YES
Is evidence of such assessment available as a separate submission?	YES
Are any such measures included in the proposed design?	YES

Technical Data Sheet (Actual vs. Notional Building)

Building Global Parameters

	Actual	Notional
Floor area [m ²]	1851	1851
External area [m ²]	2781	2781
Weather	LON	LON
Infiltration [m ³ /hm ² @ 50Pa]	3	3
Average conductance [W/K]	846	974.35
Average U-value [W/m ² K]	0.3	0.35
Alpha value* [%]	30.49	15.62

* Percentage of the building's average heat transfer coefficient which is due to thermal bridging

Building Use

% Area Building Type

Retail/Financial and Professional Services
 Restaurants and Cafes/Drinking Establishments/Takeaways
 Offices and Workshop Businesses
 General Industrial and Special Industrial Groups
 Storage or Distribution

87 Hotels

13 Residential Institutions: Hospitals and Care Homes

Residential Institutions: Residential Schools
 Residential Institutions: Universities and Colleges
 Secure Residential Institutions
 Residential Spaces
 Non-residential Institutions: Community/Day Centre
 Non-residential Institutions: Libraries, Museums, and Galleries
 Non-residential Institutions: Education
 Non-residential Institutions: Primary Health Care Building
 Non-residential Institutions: Crown and County Courts
 General Assembly and Leisure, Night Clubs, and Theatres
 Others: Passenger Terminals
 Others: Emergency Services
 Others: Miscellaneous 24hr Activities
 Others: Car Parks 24 hrs
 Others: Stand Alone Utility Block

Energy Consumption by End Use [kWh/m²]

	Actual	Notional
Heating	6	6.72
Cooling	1.78	4.21
Auxiliary	17.99	11.81
Lighting	9.02	8.03
Hot water	92.02	105.37
Equipment*	38.37	38.37
TOTAL**	126.82	136.14

* Energy used by equipment does not count towards the total for consumption or calculating emissions.

** Total is net of any electrical energy displaced by CHP generators, if applicable.

Energy Production by Technology [kWh/m²]

	Actual	Notional
Photovoltaic systems	0	1.2
Wind turbines	0	0
CHP generators	0	0
Solar thermal systems	0	0
<i>Displaced electricity</i>	<i>0</i>	<i>1.2</i>

Energy & CO₂ Emissions Summary

	Actual	Notional
Heating + cooling demand [MJ/m ²]	100.73	122.04
Primary energy [kWh _{PE} /m ²]	187.3	199.28
Total emissions [kg/m ²]	17.22	18.32

HVAC Systems Performance										
System Type	Heat dem MJ/m2	Cool dem MJ/m2	Heat con kWh/m2	Cool con kWh/m2	Aux con kWh/m2	Heat SSEFF	Cool SSEER	Heat gen SEFF	Cool gen SEER	
[ST] No Heating or Cooling										
Actual	0	0	0	0	0	0	0	0	0	
Notional	0	0	0	0	0	0	0	----	----	
[ST] No Heating or Cooling										
Actual	0	0	0	0	0	0	0	0	0	
Notional	0	0	0	0	0	0	0	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	59.4	28.3	3.9	1.3	10.9	4.2	6	4.2	6	
Notional	8.6	47.4	0.9	3	11.6	2.64	4.4	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	0	615.1	0	28.5	12.3	0	6	0	6	
Notional	0.1	1058.2	0	66.8	5	2.64	4.4	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	0	40.6	0	1.9	54.6	0	6	0	6	
Notional	1.6	64.2	0.2	4.1	34.3	2.64	4.4	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	100.5	10.3	6.6	0.5	14.6	4.2	6	4.2	6	
Notional	78.4	22.5	8.3	1.4	5.9	2.64	4.4	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	17.1	0	1.1	0	10.3	4.2	0	4.2	0	
Notional	17	0	1.8	0	20.2	2.64	0	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	0	39.3	0	1.8	54.6	0	6	0	6	
Notional	0.3	45.1	0	2.9	34.3	2.64	4.4	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	232.8	0	64.7	0	0	1	0	1	0	
Notional	235.4	0	48.8	0	0	1.34	0	----	----	

Key to terms

Heat dem [MJ/m2]	= Heating energy demand
Cool dem [MJ/m2]	= Cooling energy demand
Heat con [kWh/m2]	= Heating energy consumption
Cool con [kWh/m2]	= Cooling energy consumption
Aux con [kWh/m2]	= Auxiliary energy consumption
Heat SSEFF	= Heating system seasonal efficiency (for notional building, value depends on activity glazing class)
Cool SSEER	= Cooling system seasonal energy efficiency ratio
Heat gen SSEFF	= Heating generator seasonal efficiency
Cool gen SSEER	= Cooling generator seasonal energy efficiency ratio
ST	= System type
HS	= Heat source
HFT	= Heating fuel type
CFT	= Cooling fuel type

Project name

Hythe Imperial Hotel and Hythe Golf Club As designed

Date: Tue Feb 03 11:06:56 2026

Administrative information

Building Details

Address: Leisure Building - Hythe Imperial Hotel and Hythe Golf Club, Princess Parade, Hythe, Kent, CT21 6AE

Certifier details

Name:

Telephone number:

Address: , ,

Certification tool

Calculation engine: TAS

Calculation engine version: "v9.5.7"

Interface to calculation engine: TAS

Interface to calculation engine version: v9.5.7

BRUKL compliance module version: v6.1.e.1

Foundation area [m²]: 628.47The CO₂ emission and primary energy rates of the building must not exceed the targets

The building does not comply with England Building Regulations Part L 2021

Target CO ₂ emission rate (TER), kgCO ₂ /m ² .annum	18.41
Building CO ₂ emission rate (BER), kgCO ₂ /m ² .annum	18.61
Target primary energy rate (TPER), kWh _{PE} /m ² .annum	200.1
Building primary energy rate (BPER), kWh _{PE} /m ² .annum	202.3
Do the building's emission and primary energy rates exceed the targets?	BER > TER BPER > TPER

The performance of the building fabric and fixed building services should achieve reasonable overall standards of energy efficiency

Fabric element	U _{a-Limit}	U _{a-Calc}	U _{i-Calc}	First surface with maximum value
Walls*	0.26	0.18	0.18	External Wall_Hythe
Floors	0.18	0.15	0.16	Exposed Floor
Pitched roofs	0.16	-	-	No pitched roofs in project
Flat roofs	0.18	0.17	0.18	Roof
Windows** and roof windows	1.6	1.21	1.46	GL_Leisure_GF_dr
Rooflights***	2.2	-	-	No rooflights in project
Personnel doors^	1.6	-	-	No personnel doors in project
Vehicle access & similar large doors	1.3	-	-	No vehicle access or similar large doors in project
High usage entrance doors	3	-	-	No high usage entrance doors in project
U _{a-Limit} = Limiting area-weighted average U-values [W/(m ² K)] U _{a-Calc} = Calculated area-weighted average U-values [W/(m ² K)] U _{i-Calc} = Calculated maximum individual element U-values [W/(m ² K)] * Automatic U-value check by the tool does not apply to curtain walls whose limiting standard is similar to that for windows. ** Display windows and similar glazing are excluded from the U-value check. *** Values for rooflights refer to the horizontal position. ^ For fire doors, limiting U-value is 1.8 W/m ² K NB: Neither roof ventilators (inc. smoke vents) nor swimming pool basins are modelled or checked against the limiting standards by the tool.				

Air permeability	Limiting standard	This building
m ³ /(h.m ²) at 50 Pa	8	3

Building services

For details on the standard values listed below, system-specific guidance, and additional regulatory requirements, refer to the Approved Documents.

Whole building lighting automatic monitoring & targeting with alarms for out-of-range values	NO
Whole building electric power factor achieved by power factor correction	>0.95

1- Fitness (3 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	6	-	-	0.7
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

2- Reception (Leisure_RC_GF_1)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	6	-	-	0.7
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

3- Sauna and Steam (2 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	6	-	-	0.7
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

4- Office (Leisure_OF_1F_1)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	6	-	-	0.7
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

5- WC and Shower

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	-	-	-
Standard value	N/A	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO

6- Changing (4 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	-	-	1.8	0.7
Standard value	N/A	N/A	N/A	1.5^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
^ Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.					

7- Swim (Leisure_Swim_GF_1)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	-	-	-	0.7
Standard value	0.93*	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
* Standard shown is for gas single boiler systems <=2 MW output and overall for multi-boiler systems. For single boiler systems >2 MW or any individual boiler in a multi-boiler system, limiting efficiency is 0.88.					

1- New HWS Circuit

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	3.2	0
Standard value	2*	N/A
* Standard shown is for all types except absorption and gas engine heat pumps.		

2- Swim

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	Hot water provided by HVAC system	0
Standard value	N/A	N/A

Zone-level mechanical ventilation, exhaust, and terminal units

ID	System type in the Approved Documents
A	Local supply or extract ventilation units
B	Zonal supply system where the fan is remote from the zone
C	Zonal extract system where the fan is remote from the zone
D	Zonal balanced supply and extract ventilation system
E	Local balanced supply and extract ventilation units
F	Other local ventilation units
G	Fan assisted terminal variable air volume units
H	Fan coil units
I	Kitchen extract with the fan remote from the zone and a grease filter
NB: Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.	

Zone name	SFP [W/(l/s)]										HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I		Zone	Standard
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1			
Leisure_RC_GF_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Leisure_CH_GF_1	-	-	-	-	-	1.8	-	-	-	-	-	N/A
Leisure_CH_GF_2	-	-	-	-	-	1.8	-	-	-	-	-	N/A
Leisure_Sauna_GF_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Leisure_Steam_GF_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Leisure_Swim_GF_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Leisure_Studio_1F_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Leisure_OF_1F_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Leisure_CH_1F_1	-	-	-	-	-	1.8	-	-	-	-	-	N/A
Leisure_CH_1F_2	-	-	-	-	-	1.8	-	-	-	-	-	N/A
Leisure_SwimVoid_1F_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Leisure_Gym_1F_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
	Standard value	95	80	0.3
Leisure_CO_GF_1		110	-	-
Leisure_CO_GF_2		110	-	-
Leisure_RC_GF_1		110	95	-
Leisure_SH_GF_1		110	-	-
Leisure_SH_GF_2		110	-	-
Leisure_SH_GF_3		110	-	-
Leisure_SH_GF_4		110	-	-
Leisure_CH_GF_1		110	-	-
Leisure_CH_GF_2		110	-	-
Leisure_WC_GF_1		110	-	-
Leisure_WC_GF_2		110	-	-
Leisure_Sauna_GF_1		110	-	-
Leisure_Steam_GF_1		110	-	-
Leisure_PL_GF_1		110	-	-
Leisure_Swim_GF_1		110	-	-
Leisure_ST_GF_1		110	-	-
Leisure_Studio_1F_1		110	-	-
Leisure_SR_1F_1		110	-	-
Leisure_SR_1F_2		110	-	-
Leisure_SR_1F_3		110	-	-
Leisure_OF_1F_1		110	-	-
Leisure_CH_1F_1		110	-	-
Leisure_CH_1F_2		110	-	-
Leisure_SH_1F_1		110	-	-
Leisure_SH_1F_2		110	-	-
Leisure_SH_1F_3		110	-	-
Leisure_SH_1F_4		110	-	-
Leisure_WC_1F_1		110	-	-
Leisure_WC_1F_2		110	-	-
Leisure_ST_1F_1		110	-	-
Leisure_CO_1F_1		110	-	-
Leisure_SwimVoid_1F_1		110	-	-
Leisure_AccWC_1F_1		110	-	-
Leisure_Gym_1F_1		110	-	-

The spaces in the building should have appropriate passive control measures to limit solar gains in summer

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Leisure_RC_GF_1	NO (-41%)	NO
Leisure_Sauna_GF_1	N/A	N/A
Leisure_Steam_GF_1	N/A	N/A
Leisure_Swim_GF_1	NO (-67%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Leisure_Studio_1F_1	YES (+2%)	NO
Leisure_OF_1F_1	N/A	N/A
Leisure_SwimVoid_1F_1	NO (-50%)	NO
Leisure_Gym_1F_1	YES (+53%)	NO

Regulation 25A: Consideration of high efficiency alternative energy systems

Were alternative energy systems considered and analysed as part of the design process?	YES
Is evidence of such assessment available as a separate submission?	YES
Are any such measures included in the proposed design?	YES

Technical Data Sheet (Actual vs. Notional Building)

Building Global Parameters

	Actual	Notional
Floor area [m ²]	1425	1425
External area [m ²]	2843	2843
Weather	LON	LON
Infiltration [m ³ /hm ² @ 50Pa]	3	3
Average conductance [W/K]	1054	851
Average U-value [W/m ² K]	0.37	0.3
Alpha value* [%]	24.25	9.25

* Percentage of the building's average heat transfer coefficient which is due to thermal bridging

Building Use

% Area Building Type

Retail/Financial and Professional Services
 Restaurants and Cafes/Drinking Establishments/Takeaways
 Offices and Workshop Businesses
 General Industrial and Special Industrial Groups
 Storage or Distribution
 Hotels
 Residential Institutions: Hospitals and Care Homes
 Residential Institutions: Residential Schools
 Residential Institutions: Universities and Colleges
 Secure Residential Institutions
 Residential Spaces
 Non-residential Institutions: Community/Day Centre
 Non-residential Institutions: Libraries, Museums, and Galleries
 Non-residential Institutions: Education
 Non-residential Institutions: Primary Health Care Building
 Non-residential Institutions: Crown and County Courts
100 General Assembly and Leisure, Night Clubs, and Theatres
 Others: Passenger Terminals
 Others: Emergency Services
 Others: Miscellaneous 24hr Activities
 Others: Car Parks 24 hrs
 Others: Stand Alone Utility Block

Energy Consumption by End Use [kWh/m²]

	Actual	Notional
Heating	6.09	7.48
Cooling	1.58	2.91
Auxiliary	27.27	17.91
Lighting	17.32	16.68
Hot water	84.64	90.99
Equipment*	409.22	409.22
TOTAL**	136.91	135.98

* Energy used by equipment does not count towards the total for consumption or calculating emissions.

** Total is net of any electrical energy displaced by CHP generators, if applicable.

Energy Production by Technology [kWh/m²]

	Actual	Notional
Photovoltaic systems	0	0.56
Wind turbines	0	0
CHP generators	0	0
Solar thermal systems	0	0
<i>Displaced electricity</i>	<i>0</i>	<i>0.56</i>

Energy & CO₂ Emissions Summary

	Actual	Notional
Heating + cooling demand [MJ/m ²]	118.3	121.03
Primary energy [kWh _{PE} /m ²]	202.3	200.1
Total emissions [kg/m ²]	18.61	18.41

HVAC Systems Performance										
System Type	Heat dem MJ/m2	Cool dem MJ/m2	Heat con kWh/m2	Cool con kWh/m2	Aux con kWh/m2	Heat SSEFF	Cool SSEER	Heat gen SEFF	Cool gen SEER	
[ST] No Heating or Cooling										
Actual	0	0	0	0	0	0	0	0	0	
Notional	0	0	0	0	0	0	0	----	----	
[ST] No Heating or Cooling										
Actual	0	0	0	0	0	0	0	0	0	
Notional	0	0	0	0	0	0	0	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	47.2	41.1	3.1	1.9	37.2	4.2	6	4.2	6	
Notional	49.8	52	5.2	3.3	24.2	2.64	4.4	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	84.6	151.7	5.6	7	8.6	4.2	6	4.2	6	
Notional	20.6	279.4	2.2	17.6	5.4	2.64	4.4	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	0	409	0	18.9	10.2	4.2	6	4.2	6	
Notional	0	482.7	0	30.5	4.1	2.64	4.4	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	6.6	232.9	0.4	10.8	9.4	4.2	6	4.2	6	
Notional	4.6	309.2	0.5	19.5	3.8	2.64	4.4	----	----	
[ST] No Heating or Cooling										
Actual	0	0	0	0	0	0	0	0	0	
Notional	0	0	0	0	0	0	0	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	107.2	0	29.8	0	0	1	0	1	0	
Notional	103.5	0	21.5	0	0	1.34	0	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	22.5	0	1.5	0	14.1	4.2	0	4.2	0	
Notional	22.3	0	2.4	0	6.3	2.64	0	----	----	
[ST] Variable refrigerant flow, [HS] LTHW boiler, [HFT] Electricity, [CFT] Electricity										
Actual	216.5	0	14.3	0	21.7	4.2	0	4.2	0	
Notional	215.4	0	22.7	0	22.9	2.64	4.4	----	----	

Key to terms

Heat dem [MJ/m2]	= Heating energy demand
Cool dem [MJ/m2]	= Cooling energy demand
Heat con [kWh/m2]	= Heating energy consumption
Cool con [kWh/m2]	= Cooling energy consumption
Aux con [kWh/m2]	= Auxiliary energy consumption
Heat SSEFF	= Heating system seasonal efficiency (for notional building, value depends on activity glazing class)
Cool SSEER	= Cooling system seasonal energy efficiency ratio
Heat gen SSEFF	= Heating generator seasonal efficiency
Cool gen SSEER	= Cooling generator seasonal energy efficiency ratio
ST	= System type
HS	= Heat source
HFT	= Heating fuel type
CFT	= Cooling fuel type

Appendix E BRUKL Output Document – with On-Site Renewable Technologies Improvements

Project name

Hythe Imperial Hotel and Hythe Golf Club As designed

Date: Wed Jan 07 16:21:48 2026

Administrative information

Building Details

Address: Golf Building - Hythe Imperial Hotel and Hythe Golf Club, Princess Parade, Hythe, Kent, CT21 6AE

Certifier details

Name:

Telephone number:

Address: , ,

Certification tool

Calculation engine: TAS

Calculation engine version: "v9.5.7"

Interface to calculation engine: TAS

Interface to calculation engine version: v9.5.7

BRUKL compliance module version: v6.1.e.1

Foundation area [m²]: 533.33The CO₂ emission and primary energy rates of the building must not exceed the targets

Target CO ₂ emission rate (TER), kgCO ₂ /m ² .annum	8.65
Building CO ₂ emission rate (BER), kgCO ₂ /m ² .annum	8.6
Target primary energy rate (TPER), kWh _{PE} /m ² .annum	92.59
Building primary energy rate (BPER), kWh _{PE} /m ² .annum	91.89
Do the building's emission and primary energy rates exceed the targets?	BER ≤ TER BPER ≤ TPER

The performance of the building fabric and fixed building services should achieve reasonable overall standards of energy efficiency

Fabric element	U _{a-Limit}	U _{a-Calc}	U _{i-Calc}	First surface with maximum value
Walls*	0.26	0.18	0.18	External Wall_golfclub 0.4
Floors	0.18	0.15	0.15	Ground Floor
Pitched roofs	0.16	-	-	No pitched roofs in project
Flat roofs	0.18	0.18	0.18	Roof
Windows** and roof windows	1.6	1.14	1.93	GL_Golf_roof_0.125
Rooflights***	2.2	-	-	No rooflights in project
Personnel doors^	1.6	-	-	No personnel doors in project
Vehicle access & similar large doors	1.3	-	-	No vehicle access or similar large doors in project
High usage entrance doors	3	-	-	No high usage entrance doors in project
U _{a-Limit} = Limiting area-weighted average U-values [W/(m ² K)] U _{a-Calc} = Calculated area-weighted average U-values [W/(m ² K)] U _{i-Calc} = Calculated maximum individual element U-values [W/(m ² K)] * Automatic U-value check by the tool does not apply to curtain walls whose limiting standard is similar to that for windows. ** Display windows and similar glazing are excluded from the U-value check. *** Values for rooflights refer to the horizontal position. ^ For fire doors, limiting U-value is 1.8 W/m ² K NB: Neither roof ventilators (inc. smoke vents) nor swimming pool basins are modelled or checked against the limiting standards by the tool.				

Air permeability	Limiting standard	This building
m ³ /(h.m ²) at 50 Pa	8	3

Building services

For details on the standard values listed below, system-specific guidance, and additional regulatory requirements, refer to the Approved Documents.

Whole building lighting automatic monitoring & targeting with alarms for out-of-range values	YES
Whole building electric power factor achieved by power factor correction	>0.95

1- Main Space (8 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	6	-	-	0.85
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

2- Changing (4 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	-	1.5	0.7
Standard value	N/A	N/A	N/A	1.5^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
^ Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.					

3- Kitchen

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	-	-	-	-
Standard value	2.5*	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

4- WC and Shower

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	-	-	-
Standard value	N/A	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES

1- DHW

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	3.2	0
Standard value	2*	N/A
* Standard shown is for all types except absorption and gas engine heat pumps.		

Zone-level mechanical ventilation, exhaust, and terminal units

ID	System type in the Approved Documents
A	Local supply or extract ventilation units
B	Zonal supply system where the fan is remote from the zone
C	Zonal extract system where the fan is remote from the zone
D	Zonal balanced supply and extract ventilation system
E	Local balanced supply and extract ventilation units
F	Other local ventilation units
G	Fan assisted terminal variable air volume units
H	Fan coil units
I	Kitchen extract with the fan remote from the zone and a grease filter
NB: Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.	

Zone name	SFP [W/(l/s)]										HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I			
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1	Zone	Standard	
Golf_CH_GF_1	-	-	-	-	-	1.5	-	-	-	-	N/A	
Golf_CH_GF_2	-	-	-	-	-	1.5	-	-	-	-	N/A	
Golf_CH_GF_3	-	-	-	-	-	1.5	-	-	-	-	N/A	
Golf_VirtualGolf_GF 1	-	-	-	-	1.7	-	-	-	-	-	N/A	
Golf_VirtualGolf_GF 2	-	-	-	-	1.7	-	-	-	-	-	N/A	
Golf_VirtualGolf_GF 3	-	-	-	-	1.7	-	-	-	-	-	N/A	
Golf_VirtualGolf_GF 4	-	-	-	-	1.7	-	-	-	-	-	N/A	
Golf_EL_GF_1	-	-	-	-	1.7	-	-	-	-	-	N/A	
Golf_CH_External_2	-	-	-	-	-	1.5	-	-	-	-	N/A	
Golf_RC_1	-	-	-	-	1.7	-	-	-	-	-	N/A	
Golf_EL_GF_2	-	-	-	-	1.7	-	-	-	-	-	N/A	
Golf_OF_1	-	-	-	-	1.7	-	-	-	-	-	N/A	
Golf_KI_GF_1	-	-	-	-	-	-	-	-	0.6	-	N/A	

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
	Standard value	95	80	0.3
Golf_WC_GF_1		-	-	-
Golf_WC_GF_2		-	-	-
Golf_WC_GF_3		-	-	-
Golf_WC_GF_4		-	-	-
Golf_SH_GF_1		-	-	-
Golf_SH_GF_2		-	-	-
Golf_SH_GF_3		-	-	-
Golf_SH_GF_4		-	-	-
Golf_AccWC_GF 1		-	-	-
Golf_CH_GF_1		-	-	-
Golf_CH_GF_2		-	-	-
Golf_CH_GF_3		-	-	-
Golf_VirtualGolf_GF 1		-	-	-
Golf_VirtualGolf_GF 2		-	-	-
Golf_VirtualGolf_GF 3		-	-	-
Golf_VirtualGolf_GF 4		-	-	-
Golf_EL_GF_1		-	-	-
Golf_WC_External_1		-	-	-
Golf_WC_External_2		-	-	-
Golf_WC_External_3		-	-	-
Golf_CH_External_2		-	-	-
Golf_SH_External_1 1		-	-	-
Golf_CB_GF_1		-	-	-
Golf_CB_GF_2		-	-	-
Golf_CB_GF_3		-	-	-
Golf_WCC_External_1		-	-	-

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
	Standard value	95	80	0.3
Golf_WCC_External_2		-	-	-
Golf_AccWC_External_1		-	-	-
Golf_CO_GF_2		-	-	-
Golf_CO_GF_3		-	-	-
Golf_RC_1		-	95	-
Golf_EL_GF_2		-	95	-
Golf_OF_1		-	-	-
Golf_SR_1		-	-	-
Golf_KI_GF_1		-	-	-

The spaces in the building should have appropriate passive control measures to limit solar gains in summer

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Golf_VirtualGolf_GF 1	NO (-89%)	NO
Golf_VirtualGolf_GF 2	NO (-84%)	NO
Golf_VirtualGolf_GF 3	NO (-80%)	NO
Golf_VirtualGolf_GF 4	NO (-84%)	NO
Golf_EL_GF_1	NO (-45%)	NO
Golf_RC_1	NO (-86%)	NO
Golf_EL_GF_2	NO (-25%)	NO
Golf_OF_1	NO (-73%)	NO

Regulation 25A: Consideration of high efficiency alternative energy systems

Were alternative energy systems considered and analysed as part of the design process?	YES
Is evidence of such assessment available as a separate submission?	YES
Are any such measures included in the proposed design?	YES

Technical Data Sheet (Actual vs. Notional Building)

Building Global Parameters

	Actual	Notional
Floor area [m ²]	579	579
External area [m ²]	1628	1628
Weather	LON	LON
Infiltration [m ³ /hm ² @ 50Pa]	3	3
Average conductance [W/K]	375	436
Average U-value [W/m ² K]	0.23	0.27
Alpha value* [%]	25.37	10.37

* Percentage of the building's average heat transfer coefficient which is due to thermal bridging

Building Use

% Area Building Type

Retail/Financial and Professional Services
 Restaurants and Cafes/Drinking Establishments/Takeaways
 Offices and Workshop Businesses
 General Industrial and Special Industrial Groups
 Storage or Distribution
 Hotels
 Residential Institutions: Hospitals and Care Homes
 Residential Institutions: Residential Schools
 Residential Institutions: Universities and Colleges
 Secure Residential Institutions
 Residential Spaces
 Non-residential Institutions: Community/Day Centre
 Non-residential Institutions: Libraries, Museums, and Galleries
 Non-residential Institutions: Education
 Non-residential Institutions: Primary Health Care Building
 Non-residential Institutions: Crown and County Courts
100 General Assembly and Leisure, Night Clubs, and Theatres
 Others: Passenger Terminals
 Others: Emergency Services
 Others: Miscellaneous 24hr Activities
 Others: Car Parks 24 hrs
 Others: Stand Alone Utility Block

Energy Consumption by End Use [kWh/m²]

	Actual	Notional
Heating	7.51	6.81
Cooling	1.97	3.65
Auxiliary	11.87	9.54
Lighting	11.84	9.43
Hot water	43.64	51.59
Equipment*	71.15	71.15
TOTAL**	76.83	81.03

* Energy used by equipment does not count towards the total for consumption or calculating emissions.

** Total is net of any electrical energy displaced by CHP generators, if applicable.

Energy Production by Technology [kWh/m²]

	Actual	Notional
Photovoltaic systems	14.88	18.44
Wind turbines	0	0
CHP generators	0	0
Solar thermal systems	0	0
<i>Displaced electricity</i>	<i>14.88</i>	<i>18.44</i>

Energy & CO₂ Emissions Summary

	Actual	Notional
Heating + cooling demand [MJ/m ²]	92.02	106.6
Primary energy [kWh _{PE} /m ²]	91.89	92.59
Total emissions [kg/m ²]	8.6	8.65

HVAC Systems Performance										
System Type	Heat dem MJ/m2	Cool dem MJ/m2	Heat con kWh/m2	Cool con kWh/m2	Aux con kWh/m2	Heat SSEFF	Cool SSEER	Heat gen SEFF	Cool gen SEER	
[ST] No Heating or Cooling										
Actual	0	0	0	0	0	0	0	0	0	
Notional	0	0	0	0	0	0	0	----	----	
[ST] No Heating or Cooling										
Actual	0	0	0	0	0	0	0	0	0	
Notional	0	0	0	0	0	0	0	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	35.7	67.8	2.4	3.1	7.4	4.2	6	4.2	6	
Notional	32.4	91.9	3.4	5.8	4.2	2.65	4.4	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	60.1	0	16.7	0	11.7	1	0	1	0	
Notional	57.8	0	12	0	8.3	1.34	0	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	16.2	0	1.1	0	0	4.2	0	4.2	0	
Notional	16	0	1.7	0	0	2.64	0	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	190.1	0	52.8	0	0	1	0	1	0	
Notional	186.8	0	38.7	0	0	1.34	0	----	----	

Key to terms

Heat dem [MJ/m2]	= Heating energy demand
Cool dem [MJ/m2]	= Cooling energy demand
Heat con [kWh/m2]	= Heating energy consumption
Cool con [kWh/m2]	= Cooling energy consumption
Aux con [kWh/m2]	= Auxiliary energy consumption
Heat SSEFF	= Heating system seasonal efficiency (for notional building, value depends on activity glazing class)
Cool SSEER	= Cooling system seasonal energy efficiency ratio
Heat gen SSEFF	= Heating generator seasonal efficiency
Cool gen SSEER	= Cooling generator seasonal energy efficiency ratio
ST	= System type
HS	= Heat source
HFT	= Heating fuel type
CFT	= Cooling fuel type

Project name

Hythe Imperial Hotel and Hythe Golf Club As designed

Date: Tue Feb 03 11:45:40 2026

Administrative information

Building Details

Address: Spa and Hotel Extension - Hythe Imperial Hotel,
Princess Parade, Hythe, Kent, ct21 6ae

Certifier details

Name:

Telephone number:

Address: , ,

Certification tool

Calculation engine: TAS

Calculation engine version: "v9.5.7"

Interface to calculation engine: TAS

Interface to calculation engine version: v9.5.7

BRUKL compliance module version: v6.1.e.1

Foundation area [m²]: 363.65The CO₂ emission and primary energy rates of the building must not exceed the targets

Target CO ₂ emission rate (TER), kgCO ₂ /m ² .annum	18.32
Building CO ₂ emission rate (BER), kgCO ₂ /m ² .annum	15.48
Target primary energy rate (TPER), kWh _{PE} /m ² .annum	199.28
Building primary energy rate (BPER), kWh _{PE} /m ² .annum	167.11
Do the building's emission and primary energy rates exceed the targets?	BER ≤ TER BPER ≤ TPER

The performance of the building fabric and fixed building services should achieve reasonable overall standards of energy efficiency

Fabric element	U _{a-Limit}	U _{a-Calc}	U _{i-Calc}	First surface with maximum value
Walls*	0.26	0.18	0.18	External Wall_Hythe
Floors	0.18	0.15	0.15	Ground Floor H&S
Pitched roofs	0.16	-	-	No pitched roofs in project
Flat roofs	0.18	0.17	0.18	Roof
Windows** and roof windows	1.6	1.2	1.83	GL_Hotel and Spa_GF_W_0.60 top
Rooflights***	2.2	-	-	No rooflights in project
Personnel doors^	1.6	-	-	No personnel doors in project
Vehicle access & similar large doors	1.3	-	-	No vehicle access or similar large doors in project
High usage entrance doors	3	-	-	No high usage entrance doors in project
U _{a-Limit} = Limiting area-weighted average U-values [W/(m ² K)] U _{a-Calc} = Calculated area-weighted average U-values [W/(m ² K)] U _{i-Calc} = Calculated maximum individual element U-values [W/(m ² K)] * Automatic U-value check by the tool does not apply to curtain walls whose limiting standard is similar to that for windows. ** Display windows and similar glazing are excluded from the U-value check. *** Values for rooflights refer to the horizontal position. ^ For fire doors, limiting U-value is 1.8 W/m ² K NB: Neither roof ventilators (inc. smoke vents) nor swimming pool basins are modelled or checked against the limiting standards by the tool.				

Air permeability	Limiting standard	This building
m ³ /(h.m ²) at 50 Pa	8	3

Building services

For details on the standard values listed below, system-specific guidance, and additional regulatory requirements, refer to the Approved Documents.

Whole building lighting automatic monitoring & targeting with alarms for out-of-range values	YES
Whole building electric power factor achieved by power factor correction	>0.95

1- Office (Spa_OF_GF_1)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	6	-	-	0.7
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

2- Reception (Spa_RC_GF_1)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	0	6	-	1.7	0.7
Standard value	N/A	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES

3- Treatment (10 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	0	6	-	1.7	0.7
Standard value	N/A	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES

4- Bedrooms (32 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	6	-	1.7	0.7
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

5- Changing (2 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	-	-	1.7	0.7
Standard value	N/A	N/A	N/A	1.5^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
^ Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.					

6- Lounge (Spa_Lounge_GF_1)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	0	6	-	-	0.7
Standard value	N/A	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES

7- WC and Shower

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	-	-	-
Standard value	N/A	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES

1- DHW

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	3.2	0
Standard value	2*	N/A

* Standard shown is for all types except absorption and gas engine heat pumps.

Zone-level mechanical ventilation, exhaust, and terminal units

ID	System type in the Approved Documents
A	Local supply or extract ventilation units
B	Zonal supply system where the fan is remote from the zone
C	Zonal extract system where the fan is remote from the zone
D	Zonal balanced supply and extract ventilation system
E	Local balanced supply and extract ventilation units
F	Other local ventilation units
G	Fan assisted terminal variable air volume units
H	Fan coil units
I	Kitchen extract with the fan remote from the zone and a grease filter

NB: Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.

Zone name	SFP [W/(l/s)]										HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I			
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1		Zone	Standard
Spa_TreatmentRm_GF_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_2	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_3	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_4	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_5	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_6	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_7	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_8	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_9	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_TreatmentRm_GF_10	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_Lounge_GF_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Spa_CH_GF_1	-	-	-	-	-	1.7	-	-	-	-	-	N/A
Spa_CH_GF_2	-	-	-	-	-	1.7	-	-	-	-	-	N/A
Spa_RC_GF_1	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_1	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_2	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_3	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_4	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_5	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_6	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_7	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_8	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_9	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_10	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_11	-	-	-	-	1.7	-	-	-	-	-	-	N/A
Hotel_BD_L01_12	-	-	-	-	1.7	-	-	-	-	-	-	N/A

Zone name	SFP [W/(l/s)]										HR efficiency	
	ID of system type	A	B	C	D	E	F	G	H	I		
	Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1	Zone	Standard
Hotel_BD_L02_1		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_2		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_3		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_4		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_5		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_6		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_7		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_8		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_9		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_10		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_11		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L02_12		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_1		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_2		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_3		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_4		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_5		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_6		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_7		-	-	-	-	1.7	-	-	-	-	-	N/A
Hotel_BD_L03_8		-	-	-	-	1.7	-	-	-	-	-	N/A
Spa_OF_GF_1		-	-	-	-	1.7	-	-	-	-	-	N/A

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
Standard value		95	80	0.3
Spa_TreatmentRm_GF_1		110	-	-
Spa_TreatmentRm_GF_2		110	-	-
Spa_TreatmentRm_GF_3		110	-	-
Spa_TreatmentRm_GF_4		110	-	-
Spa_TreatmentRm_GF_5		110	-	-
Spa_TreatmentRm_GF_6		110	-	-
Spa_TreatmentRm_GF_7		110	-	-
Spa_TreatmentRm_GF_8		110	-	-
Spa_TreatmentRm_GF_9		110	-	-
Spa_TreatmentRm_GF_10		110	-	-
Spa_Lounge_GF_1		110	-	-
Spa_CH_GF_1		110	-	-
Spa_CH_GF_2		110	-	-
Spa_SH_GF_1		110	-	-
Spa_SH_GF_2		110	-	-
Spa_RC_GF_1		110	95	-
Spa_WC_GF_1		110	-	-
Spa_WC_GF_2		110	-	-

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
	Standard value	95	80	0.3
Spa_AccWC_GF_1		110	-	-
Spa_CO_GF_1		110	-	-
ST_Core1_1		110	-	-
ST_Core1_2		110	-	-
ST_Core1_3		110	-	-
ST_Core1_GF		110	-	-
ST_Core2_GF		110	-	-
ST_Core2_L01		110	-	-
ST_Core2_L02		110	-	-
ST_Core2_L03		110	-	-
Spa_CB_GF_1		110	-	-
Hotel_BD_L01_1		110	-	-
Hotel_BD_L01_2		110	-	-
Hotel_BD_L01_3		110	-	-
Hotel_BD_L01_4		110	-	-
Hotel_BD_L01_5		110	-	-
Hotel_BD_L01_6		110	-	-
Hotel_BD_L01_7		110	-	-
Hotel_BD_L01_8		110	-	-
Hotel_BD_L01_9		110	-	-
Hotel_BD_L01_10		110	-	-
Hotel_WC_L01_1		110	-	-
Hotel_WC_L01_2		110	-	-
Hotel_WC_L01_3		110	-	-
Hotel_WC_L01_4		110	-	-
Hotel_WC_L01_5		110	-	-
Hotel_WC_L01_6		110	-	-
Hotel_WC_L01_7		110	-	-
Hotel_WC_L01_8		110	-	-
Hotel_WC_L01_9		110	-	-
Hotel_WC_L01_10		110	-	-
Spa_CO_GF_2		110	-	-
Hotel_BD_L01_11		110	-	-
Hotel_BD_L01_12		110	-	-
Hotel_WC_L01_11		110	-	-
Hotel_WC_L01_12		110	-	-
Hotel_SH_L01_1		110	-	-
Hotel_SH_L01_2		110	-	-
Hotel_SH_L01_3		110	-	-
Hotel_SH_L01_4		110	-	-
Hotel_SH_L01_5		110	-	-
Hotel_SH_L01_6		110	-	-
Hotel_SH_L01_7		110	-	-

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m ²]
	Standard value	95	80	0.3
Hotel_SH_L01_8		110	-	-
Hotel_SH_L01_9		110	-	-
Hotel_SH_L01_10		110	-	-
Hotel_SH_L01_11		110	-	-
Hotel_SH_L01_12		110	-	-
Hotel_CO_L01_1		110	-	-
Hotel_BD_L02_1		110	-	-
Hotel_BD_L02_2		110	-	-
Hotel_BD_L02_3		110	-	-
Hotel_BD_L02_4		110	-	-
Hotel_BD_L02_5		110	-	-
Hotel_BD_L02_6		110	-	-
Hotel_BD_L02_7		110	-	-
Hotel_BD_L02_8		110	-	-
Hotel_BD_L02_9		110	-	-
Hotel_BD_L02_10		110	-	-
Hotel_BD_L02_11		110	-	-
Hotel_BD_L02_12		110	-	-
Hotel_WC_L02_1		110	-	-
Hotel_WC_L02_2		110	-	-
Hotel_WC_L02_3		110	-	-
Hotel_WC_L02_4		110	-	-
Hotel_WC_L02_5		110	-	-
Hotel_WC_L02_6		110	-	-
Hotel_WC_L02_7		110	-	-
Hotel_WC_L02_8		110	-	-
Hotel_WC_L02_9		110	-	-
Hotel_WC_L02_10		110	-	-
Hotel_WC_L02_11		110	-	-
Hotel_WC_L02_12		110	-	-
Hotel_SH_L02_1		110	-	-
Hotel_SH_L02_2		110	-	-
Hotel_SH_L02_3		110	-	-
Hotel_SH_L02_4		110	-	-
Hotel_SH_L02_5		110	-	-
Hotel_SH_L02_6		110	-	-
Hotel_SH_L02_7		110	-	-
Hotel_SH_L02_8		110	-	-
Hotel_SH_L02_9		110	-	-
Hotel_SH_L02_10		110	-	-
Hotel_SH_L02_11		110	-	-
Hotel_SH_L02_12		110	-	-
Hotel_CO_L02_1		110	-	-

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
	Standard value	95	80	0.3
Hotel_BD_L03_1		110	-	-
Hotel_BD_L03_2		110	-	-
Hotel_BD_L03_3		110	-	-
Hotel_BD_L03_4		110	-	-
Hotel_BD_L03_5		110	-	-
Hotel_BD_L03_6		110	-	-
Hotel_BD_L03_7		110	-	-
Hotel_BD_L03_8		110	-	-
Hotel_WC_L03_1		110	-	-
Hotel_WC_L03_2		110	-	-
Hotel_WC_L03_3		110	-	-
Hotel_WC_L03_4		110	-	-
Hotel_WC_L03_5		110	-	-
Hotel_WC_L03_6		110	-	-
Hotel_WC_L03_7		110	-	-
Hotel_WC_L03_8		110	-	-
Hotel_SH_L03_1		110	-	-
Hotel_SH_L03_2		110	-	-
Hotel_SH_L03_3		110	-	-
Hotel_SH_L03_4		110	-	-
Hotel_SH_L03_5		110	-	-
Hotel_SH_L03_6		110	-	-
Hotel_SH_L03_7		110	-	-
Hotel_SH_L03_8		110	-	-
Hotel_CO_L03_1		110	-	-
Spa_OF_GF_1		110	-	-

The spaces in the building should have appropriate passive control measures to limit solar gains in summer

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Spa_TreatmentRm_GF_1	NO (-73%)	NO
Spa_TreatmentRm_GF_2	NO (-72%)	NO
Spa_TreatmentRm_GF_3	NO (-72%)	NO
Spa_TreatmentRm_GF_4	NO (-73%)	NO
Spa_TreatmentRm_GF_5	N/A	N/A
Spa_TreatmentRm_GF_6	N/A	N/A
Spa_TreatmentRm_GF_7	N/A	N/A
Spa_TreatmentRm_GF_8	N/A	N/A
Spa_TreatmentRm_GF_9	NO (-93%)	NO
Spa_TreatmentRm_GF_10	N/A	N/A
Spa_Lounge_GF_1	YES (+81%)	NO
Spa_RC_GF_1	N/A	N/A
Hotel_BD_L01_1	NO (-82%)	NO
Hotel_BD_L01_2	NO (-66%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Hotel_BD_L01_3	NO (-65%)	NO
Hotel_BD_L01_4	NO (-65%)	NO
Hotel_BD_L01_5	NO (-65%)	NO
Hotel_BD_L01_6	NO (-80%)	NO
Hotel_BD_L01_7	NO (-90%)	NO
Hotel_BD_L01_8	NO (-72%)	NO
Hotel_BD_L01_9	NO (-73%)	NO
Hotel_BD_L01_10	NO (-73%)	NO
Hotel_WC_L01_1	N/A	N/A
Hotel_WC_L01_2	N/A	N/A
Hotel_WC_L01_3	N/A	N/A
Hotel_WC_L01_4	N/A	N/A
Hotel_WC_L01_5	N/A	N/A
Hotel_WC_L01_6	N/A	N/A
Hotel_WC_L01_7	N/A	N/A
Hotel_WC_L01_8	N/A	N/A
Hotel_WC_L01_9	N/A	N/A
Hotel_WC_L01_10	N/A	N/A
Hotel_BD_L01_11	NO (-73%)	NO
Hotel_BD_L01_12	NO (-74%)	NO
Hotel_WC_L01_11	N/A	N/A
Hotel_WC_L01_12	N/A	N/A
Hotel_SH_L01_1	N/A	N/A
Hotel_SH_L01_2	N/A	N/A
Hotel_SH_L01_3	N/A	N/A
Hotel_SH_L01_4	N/A	N/A
Hotel_SH_L01_5	N/A	N/A
Hotel_SH_L01_6	N/A	N/A
Hotel_SH_L01_7	N/A	N/A
Hotel_SH_L01_8	N/A	N/A
Hotel_SH_L01_9	N/A	N/A
Hotel_SH_L01_10	N/A	N/A
Hotel_SH_L01_11	N/A	N/A
Hotel_SH_L01_12	N/A	N/A
Hotel_BD_L02_1	NO (-80%)	NO
Hotel_BD_L02_2	NO (-61%)	NO
Hotel_BD_L02_3	NO (-61%)	NO
Hotel_BD_L02_4	NO (-61%)	NO
Hotel_BD_L02_5	NO (-61%)	NO
Hotel_BD_L02_6	NO (-78%)	NO
Hotel_BD_L02_7	NO (-80%)	NO
Hotel_BD_L02_8	NO (-43%)	NO
Hotel_BD_L02_9	NO (-46%)	NO
Hotel_BD_L02_10	NO (-48%)	NO
Hotel_BD_L02_11	NO (-44%)	NO
Hotel_BD_L02_12	NO (-65%)	NO
Hotel_WC_L02_1	N/A	N/A
Hotel_WC_L02_2	N/A	N/A
Hotel_WC_L02_3	N/A	N/A

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Hotel_WC_L02_4	N/A	N/A
Hotel_WC_L02_5	N/A	N/A
Hotel_WC_L02_6	N/A	N/A
Hotel_WC_L02_7	N/A	N/A
Hotel_WC_L02_8	N/A	N/A
Hotel_WC_L02_9	N/A	N/A
Hotel_WC_L02_10	N/A	N/A
Hotel_WC_L02_11	N/A	N/A
Hotel_WC_L02_12	N/A	N/A
Hotel_SH_L02_1	N/A	N/A
Hotel_SH_L02_2	N/A	N/A
Hotel_SH_L02_3	N/A	N/A
Hotel_SH_L02_4	N/A	N/A
Hotel_SH_L02_5	N/A	N/A
Hotel_SH_L02_6	N/A	N/A
Hotel_SH_L02_7	N/A	N/A
Hotel_SH_L02_8	N/A	N/A
Hotel_SH_L02_9	N/A	N/A
Hotel_SH_L02_10	N/A	N/A
Hotel_SH_L02_11	N/A	N/A
Hotel_SH_L02_12	N/A	N/A
Hotel_BD_L03_1	NO (-73%)	NO
Hotel_BD_L03_2	NO (-56%)	NO
Hotel_BD_L03_3	NO (-56%)	NO
Hotel_BD_L03_4	NO (-70%)	NO
Hotel_BD_L03_5	NO (-60%)	NO
Hotel_BD_L03_6	NO (-27%)	NO
Hotel_BD_L03_7	NO (-29%)	NO
Hotel_BD_L03_8	NO (-46%)	NO
Hotel_WC_L03_1	N/A	N/A
Hotel_WC_L03_2	N/A	N/A
Hotel_WC_L03_3	N/A	N/A
Hotel_WC_L03_4	N/A	N/A
Hotel_WC_L03_5	N/A	N/A
Hotel_WC_L03_6	N/A	N/A
Hotel_WC_L03_7	N/A	N/A
Hotel_WC_L03_8	N/A	N/A
Hotel_SH_L03_1	N/A	N/A
Hotel_SH_L03_2	N/A	N/A
Hotel_SH_L03_3	N/A	N/A
Hotel_SH_L03_4	N/A	N/A
Hotel_SH_L03_5	N/A	N/A
Hotel_SH_L03_6	N/A	N/A
Hotel_SH_L03_7	N/A	N/A
Hotel_SH_L03_8	N/A	N/A
Spa_OF_GF_1	NO (-90%)	NO

Regulation 25A: Consideration of high efficiency alternative energy systems

Were alternative energy systems considered and analysed as part of the design process?	YES
Is evidence of such assessment available as a separate submission?	YES
Are any such measures included in the proposed design?	YES

Technical Data Sheet (Actual vs. Notional Building)

Building Global Parameters

	Actual	Notional
Floor area [m ²]	1851	1851
External area [m ²]	2781	2781
Weather	LON	LON
Infiltration [m ³ /hm ² @ 50Pa]	3	3
Average conductance [W/K]	846	974.35
Average U-value [W/m ² K]	0.3	0.35
Alpha value* [%]	30.49	15.62

* Percentage of the building's average heat transfer coefficient which is due to thermal bridging

Building Use

% Area Building Type

Retail/Financial and Professional Services
 Restaurants and Cafes/Drinking Establishments/Takeaways
 Offices and Workshop Businesses
 General Industrial and Special Industrial Groups
 Storage or Distribution

87 Hotels

13 Residential Institutions: Hospitals and Care Homes

Residential Institutions: Residential Schools
 Residential Institutions: Universities and Colleges
 Secure Residential Institutions
 Residential Spaces
 Non-residential Institutions: Community/Day Centre
 Non-residential Institutions: Libraries, Museums, and Galleries
 Non-residential Institutions: Education
 Non-residential Institutions: Primary Health Care Building
 Non-residential Institutions: Crown and County Courts
 General Assembly and Leisure, Night Clubs, and Theatres
 Others: Passenger Terminals
 Others: Emergency Services
 Others: Miscellaneous 24hr Activities
 Others: Car Parks 24 hrs
 Others: Stand Alone Utility Block

Energy Consumption by End Use [kWh/m²]

	Actual	Notional
Heating	6	6.72
Cooling	1.78	4.21
Auxiliary	17.99	11.81
Lighting	9.02	8.03
Hot water	92.02	105.37
Equipment*	38.37	38.37
TOTAL**	126.82	136.14

* Energy used by equipment does not count towards the total for consumption or calculating emissions.

** Total is net of any electrical energy displaced by CHP generators, if applicable.

Energy Production by Technology [kWh/m²]

	Actual	Notional
Photovoltaic systems	13.78	1.2
Wind turbines	0	0
CHP generators	0	0
Solar thermal systems	0	0
<i>Displaced electricity</i>	<i>13.78</i>	<i>1.2</i>

Energy & CO₂ Emissions Summary

	Actual	Notional
Heating + cooling demand [MJ/m ²]	100.73	122.04
Primary energy [kWh _{PE} /m ²]	167.11	199.28
Total emissions [kg/m ²]	15.48	18.32

HVAC Systems Performance										
System Type	Heat dem MJ/m2	Cool dem MJ/m2	Heat con kWh/m2	Cool con kWh/m2	Aux con kWh/m2	Heat SSEFF	Cool SSEER	Heat gen SEFF	Cool gen SEER	
[ST] No Heating or Cooling										
Actual	0	0	0	0	0	0	0	0	0	
Notional	0	0	0	0	0	0	0	----	----	
[ST] No Heating or Cooling										
Actual	0	0	0	0	0	0	0	0	0	
Notional	0	0	0	0	0	0	0	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	59.4	28.3	3.9	1.3	10.9	4.2	6	4.2	6	
Notional	8.6	47.4	0.9	3	11.6	2.64	4.4	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	0	615.1	0	28.5	12.3	0	6	0	6	
Notional	0.1	1058.2	0	66.8	5	2.64	4.4	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	0	40.6	0	1.9	54.6	0	6	0	6	
Notional	1.6	64.2	0.2	4.1	34.3	2.64	4.4	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	100.5	10.3	6.6	0.5	14.6	4.2	6	4.2	6	
Notional	78.4	22.5	8.3	1.4	5.9	2.64	4.4	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	17.1	0	1.1	0	10.3	4.2	0	4.2	0	
Notional	17	0	1.8	0	20.2	2.64	0	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	0	39.3	0	1.8	54.6	0	6	0	6	
Notional	0.3	45.1	0	2.9	34.3	2.64	4.4	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	232.8	0	64.7	0	0	1	0	1	0	
Notional	235.4	0	48.8	0	0	1.34	0	----	----	

Key to terms

Heat dem [MJ/m2]	= Heating energy demand
Cool dem [MJ/m2]	= Cooling energy demand
Heat con [kWh/m2]	= Heating energy consumption
Cool con [kWh/m2]	= Cooling energy consumption
Aux con [kWh/m2]	= Auxiliary energy consumption
Heat SSEFF	= Heating system seasonal efficiency (for notional building, value depends on activity glazing class)
Cool SSEER	= Cooling system seasonal energy efficiency ratio
Heat gen SSEFF	= Heating generator seasonal efficiency
Cool gen SSEER	= Cooling generator seasonal energy efficiency ratio
ST	= System type
HS	= Heat source
HFT	= Heating fuel type
CFT	= Cooling fuel type

Project name

Hythe Imperial Hotel and Hythe Golf Club As designed

Date: Tue Feb 03 10:34:11 2026

Administrative information

Building Details

Address: Leisure Building - Hythe Imperial Hotel and Hythe Golf Club, Princess Parade, Hythe, Kent, CT21 6AE

Certifier details

Name:

Telephone number:

Address: , ,

Certification tool

Calculation engine: TAS

Calculation engine version: "v9.5.7"

Interface to calculation engine: TAS

Interface to calculation engine version: v9.5.7

BRUKL compliance module version: v6.1.e.1

Foundation area [m²]: 628.47The CO₂ emission and primary energy rates of the building must not exceed the targets

Target CO ₂ emission rate (TER), kgCO ₂ /m ² .annum	18.41
Building CO ₂ emission rate (BER), kgCO ₂ /m ² .annum	16.77
Target primary energy rate (TPER), kWh _{PE} /m ² .annum	200.1
Building primary energy rate (BPER), kWh _{PE} /m ² .annum	181.04
Do the building's emission and primary energy rates exceed the targets?	BER ≤ TER BPER ≤ TPER

The performance of the building fabric and fixed building services should achieve reasonable overall standards of energy efficiency

Fabric element	U _{a-Limit}	U _{a-Calc}	U _{i-Calc}	First surface with maximum value
Walls*	0.26	0.18	0.18	External Wall_Hythe
Floors	0.18	0.15	0.16	Exposed Floor
Pitched roofs	0.16	-	-	No pitched roofs in project
Flat roofs	0.18	0.17	0.18	Roof
Windows** and roof windows	1.6	1.21	1.46	GL_Leisure_GF_dr
Rooflights***	2.2	-	-	No rooflights in project
Personnel doors^	1.6	-	-	No personnel doors in project
Vehicle access & similar large doors	1.3	-	-	No vehicle access or similar large doors in project
High usage entrance doors	3	-	-	No high usage entrance doors in project

U_{a-Limit} = Limiting area-weighted average U-values [W/(m²K)]U_{a-Calc} = Calculated area-weighted average U-values [W/(m²K)]U_{i-Calc} = Calculated maximum individual element U-values [W/(m²K)]

* Automatic U-value check by the tool does not apply to curtain walls whose limiting standard is similar to that for windows.

** Display windows and similar glazing are excluded from the U-value check.

*** Values for rooflights refer to the horizontal position.

^ For fire doors, limiting U-value is 1.8 W/m²K

NB: Neither roof ventilators (inc. smoke vents) nor swimming pool basins are modelled or checked against the limiting standards by the tool.

Air permeability	Limiting standard	This building
m ³ /(h.m ²) at 50 Pa	8	3

Building services

For details on the standard values listed below, system-specific guidance, and additional regulatory requirements, refer to the Approved Documents.

Whole building lighting automatic monitoring & targeting with alarms for out-of-range values	NO
Whole building electric power factor achieved by power factor correction	>0.95

1- Fitness (3 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	6	-	-	0.7
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

2- Reception (Leisure_RC_GF_1)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	6	-	-	0.7
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

3- Sauna and Steam (2 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	6	-	-	0.7
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

4- Office (Leisure_OF_1F_1)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	6	-	-	0.7
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

5- WC and Shower

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	-	-	-
Standard value	N/A	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO

6- Changing (4 Zones)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	-	-	1.8	0.7
Standard value	N/A	N/A	N/A	1.5^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
^ Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.					

7- Swim (Leisure_Swim_GF_1)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	-	-	-	0.7
Standard value	0.93*	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
* Standard shown is for gas single boiler systems <=2 MW output and overall for multi-boiler systems. For single boiler systems >2 MW or any individual boiler in a multi-boiler system, limiting efficiency is 0.88.					

1- New HWS Circuit

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	3.2	0
Standard value	2*	N/A
* Standard shown is for all types except absorption and gas engine heat pumps.		

2- Swim

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	Hot water provided by HVAC system	0
Standard value	N/A	N/A

Zone-level mechanical ventilation, exhaust, and terminal units

ID	System type in the Approved Documents
A	Local supply or extract ventilation units
B	Zonal supply system where the fan is remote from the zone
C	Zonal extract system where the fan is remote from the zone
D	Zonal balanced supply and extract ventilation system
E	Local balanced supply and extract ventilation units
F	Other local ventilation units
G	Fan assisted terminal variable air volume units
H	Fan coil units
I	Kitchen extract with the fan remote from the zone and a grease filter
NB: Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.	

Zone name	SFP [W/(l/s)]										HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I		Zone	Standard
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1			
Leisure_RC_GF_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Leisure_CH_GF_1	-	-	-	-	-	1.8	-	-	-	-	-	N/A
Leisure_CH_GF_2	-	-	-	-	-	1.8	-	-	-	-	-	N/A
Leisure_Sauna_GF_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Leisure_Steam_GF_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Leisure_Swim_GF_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Leisure_Studio_1F_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Leisure_OF_1F_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Leisure_CH_1F_1	-	-	-	-	-	1.8	-	-	-	-	-	N/A
Leisure_CH_1F_2	-	-	-	-	-	1.8	-	-	-	-	-	N/A
Leisure_SwimVoid_1F_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A
Leisure_Gym_1F_1	1.7	-	-	-	-	-	-	-	-	-	-	N/A

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
	Standard value	95	80	0.3
Leisure_CO_GF_1		110	-	-
Leisure_CO_GF_2		110	-	-
Leisure_RC_GF_1		110	95	-
Leisure_SH_GF_1		110	-	-
Leisure_SH_GF_2		110	-	-
Leisure_SH_GF_3		110	-	-
Leisure_SH_GF_4		110	-	-
Leisure_CH_GF_1		110	-	-
Leisure_CH_GF_2		110	-	-
Leisure_WC_GF_1		110	-	-
Leisure_WC_GF_2		110	-	-
Leisure_Sauna_GF_1		110	-	-
Leisure_Steam_GF_1		110	-	-
Leisure_PL_GF_1		110	-	-
Leisure_Swim_GF_1		110	-	-
Leisure_ST_GF_1		110	-	-
Leisure_Studio_1F_1		110	-	-
Leisure_SR_1F_1		110	-	-
Leisure_SR_1F_2		110	-	-
Leisure_SR_1F_3		110	-	-
Leisure_OF_1F_1		110	-	-
Leisure_CH_1F_1		110	-	-
Leisure_CH_1F_2		110	-	-
Leisure_SH_1F_1		110	-	-
Leisure_SH_1F_2		110	-	-
Leisure_SH_1F_3		110	-	-
Leisure_SH_1F_4		110	-	-
Leisure_WC_1F_1		110	-	-
Leisure_WC_1F_2		110	-	-
Leisure_ST_1F_1		110	-	-
Leisure_CO_1F_1		110	-	-
Leisure_SwimVoid_1F_1		110	-	-
Leisure_AccWC_1F_1		110	-	-
Leisure_Gym_1F_1		110	-	-

The spaces in the building should have appropriate passive control measures to limit solar gains in summer

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Leisure_RC_GF_1	NO (-41%)	NO
Leisure_Sauna_GF_1	N/A	N/A
Leisure_Steam_GF_1	N/A	N/A
Leisure_Swim_GF_1	NO (-67%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Leisure_Studio_1F_1	YES (+2%)	NO
Leisure_OF_1F_1	N/A	N/A
Leisure_SwimVoid_1F_1	NO (-50%)	NO
Leisure_Gym_1F_1	YES (+53%)	NO

Regulation 25A: Consideration of high efficiency alternative energy systems

Were alternative energy systems considered and analysed as part of the design process?	YES
Is evidence of such assessment available as a separate submission?	YES
Are any such measures included in the proposed design?	YES

Technical Data Sheet (Actual vs. Notional Building)

Building Global Parameters

	Actual	Notional
Floor area [m ²]	1425	1425
External area [m ²]	2843	2843
Weather	LON	LON
Infiltration [m ³ /hm ² @ 50Pa]	3	3
Average conductance [W/K]	1054	851
Average U-value [W/m ² K]	0.37	0.3
Alpha value* [%]	24.25	9.25

* Percentage of the building's average heat transfer coefficient which is due to thermal bridging

Building Use

% Area Building Type

Retail/Financial and Professional Services
 Restaurants and Cafes/Drinking Establishments/Takeaways
 Offices and Workshop Businesses
 General Industrial and Special Industrial Groups
 Storage or Distribution
 Hotels
 Residential Institutions: Hospitals and Care Homes
 Residential Institutions: Residential Schools
 Residential Institutions: Universities and Colleges
 Secure Residential Institutions
 Residential Spaces
 Non-residential Institutions: Community/Day Centre
 Non-residential Institutions: Libraries, Museums, and Galleries
 Non-residential Institutions: Education
 Non-residential Institutions: Primary Health Care Building
 Non-residential Institutions: Crown and County Courts
100 General Assembly and Leisure, Night Clubs, and Theatres
 Others: Passenger Terminals
 Others: Emergency Services
 Others: Miscellaneous 24hr Activities
 Others: Car Parks 24 hrs
 Others: Stand Alone Utility Block

Energy Consumption by End Use [kWh/m²]

	Actual	Notional
Heating	6.09	7.48
Cooling	1.58	2.91
Auxiliary	27.27	17.91
Lighting	17.32	16.68
Hot water	84.64	90.99
Equipment*	409.22	409.22
TOTAL**	136.91	135.98

* Energy used by equipment does not count towards the total for consumption or calculating emissions.

** Total is net of any electrical energy displaced by CHP generators, if applicable.

Energy Production by Technology [kWh/m²]

	Actual	Notional
Photovoltaic systems	14.51	0.56
Wind turbines	0	0
CHP generators	0	0
Solar thermal systems	0	0
<i>Displaced electricity</i>	<i>14.51</i>	<i>0.56</i>

Energy & CO₂ Emissions Summary

	Actual	Notional
Heating + cooling demand [MJ/m ²]	118.3	121.03
Primary energy [kWh _{PE} /m ²]	181.04	200.1
Total emissions [kg/m ²]	16.77	18.41

HVAC Systems Performance										
System Type	Heat dem MJ/m2	Cool dem MJ/m2	Heat con kWh/m2	Cool con kWh/m2	Aux con kWh/m2	Heat SSEFF	Cool SSEER	Heat gen SEFF	Cool gen SEER	
[ST] No Heating or Cooling										
Actual	0	0	0	0	0	0	0	0	0	
Notional	0	0	0	0	0	0	0	----	----	
[ST] No Heating or Cooling										
Actual	0	0	0	0	0	0	0	0	0	
Notional	0	0	0	0	0	0	0	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	47.2	41.1	3.1	1.9	37.2	4.2	6	4.2	6	
Notional	49.8	52	5.2	3.3	24.2	2.64	4.4	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	84.6	151.7	5.6	7	8.6	4.2	6	4.2	6	
Notional	20.6	279.4	2.2	17.6	5.4	2.64	4.4	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	0	409	0	18.9	10.2	4.2	6	4.2	6	
Notional	0	482.7	0	30.5	4.1	2.64	4.4	----	----	
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	6.6	232.9	0.4	10.8	9.4	4.2	6	4.2	6	
Notional	4.6	309.2	0.5	19.5	3.8	2.64	4.4	----	----	
[ST] No Heating or Cooling										
Actual	0	0	0	0	0	0	0	0	0	
Notional	0	0	0	0	0	0	0	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	107.2	0	29.8	0	0	1	0	1	0	
Notional	103.5	0	21.5	0	0	1.34	0	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	22.5	0	1.5	0	14.1	4.2	0	4.2	0	
Notional	22.3	0	2.4	0	6.3	2.64	0	----	----	
[ST] Variable refrigerant flow, [HS] LTHW boiler, [HFT] Electricity, [CFT] Electricity										
Actual	216.5	0	14.3	0	21.7	4.2	0	4.2	0	
Notional	215.4	0	22.7	0	22.9	2.64	4.4	----	----	

Key to terms

Heat dem [MJ/m2]	= Heating energy demand
Cool dem [MJ/m2]	= Cooling energy demand
Heat con [kWh/m2]	= Heating energy consumption
Cool con [kWh/m2]	= Cooling energy consumption
Aux con [kWh/m2]	= Auxiliary energy consumption
Heat SSEFF	= Heating system seasonal efficiency (for notional building, value depends on activity glazing class)
Cool SSEER	= Cooling system seasonal energy efficiency ratio
Heat gen SSEFF	= Heating generator seasonal efficiency
Cool gen SSEER	= Cooling generator seasonal energy efficiency ratio
ST	= System type
HS	= Heat source
HFT	= Heating fuel type
CFT	= Cooling fuel type



People. Places. Planet.