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Company: Deansgate SOF Alliance LeaseCo Limited
Project: Renaissance Hotel, Manchester **Job number:** P2027

Energy Statement

1.1 Introduction

This short-form Energy Statement has been prepared to accompany a planning application for external alterations to the the former Renaissance Hotel, Deansgate, Manchester.

The site currently comprises a vacant 15-storey, 203 bedroom hotel building, a multi-storey car park, a restaurant and a dilapidated former office building (Premier House) which has been vacant for many years.

The hotel forms part of the wider redevelopment aspirations for the Renaissance site being brought forward by the Applicants, Deansgate SOF Alliance LeaseCo Limited, a joint venture between Property Alliance Group (PAG) and an affiliate of Starwood Capital (SCG).

This planning application proposes external alterations to the existing hotel building as part of a wider internal redevelopment to create a new high-quality destination hotel to be operated by the leading brand.

It is important to emphasise that this application relates only to the external alterations and improvements to the existing hotel building. Whilst extensive modifications to the internal layouts will be undertaken as part of the hotel redevelopment, these do not require planning consent.

The purpose of this short-form Energy Statement is to set out how the proposals will deliver significant performance upgrades to the building which will realise substantial embodied carbon reductions in line with local and national policy aspirations.

1.2 Planning Policy

Manchester Core Strategy

Manchester's Core Strategy (CS) was adopted on 11th July 2012 and is the key Development Plan Document (DPD) guiding sustainable design and development in the city.

CS Policy EN 4 – Reducing CO2 Emissions: This policy targets the reducing of CO2 emissions through the following of the energy hierarchy; firstly reducing the need for energy through efficient design measures, followed by clean energy and lastly, the application of renewable or

LZC technologies. In addition to this point, MCC state within this policy all new development is required to use building materials that have low embodied carbon.

Manchester Climate Change Framework 2020-25b

Following the declaration of a climate emergency by MCC In July 2019, this framework was adopted and is an in-depth strategy to accompany the Draft Manchester Zero Carbon Framework 2020-38, which was published in February 2019. It is a framework that will continue to develop over the next five years, in line with changes in policy, climate science, rate of progress and other factors. The framework has set out four objectives to facilitate this:

Objective 1 – Staying within carbon budgets

- Direct CO2 emissions: staying within our 15-million-ton carbon budget for 2018-2100, including reducing the CO2 emitted from our homes, workplaces and ground transport by at least 50%during 2020-25.
- Indirect CO2 emissions: understanding and taking action on the things that we consume, and which generate greenhouse gases through their production, transportation and disposal.

Objective 2 – Climate adaptation and resilience

- Increase the amount of urban green infrastructure cover, aiming for a 10% increase by 2038 from 2018 levels, in line with the Greater Manchester aim.
- Respond to these risks by incorporating adaptation and resilience within our plans and strategies, and acting to make necessary changes to our buildings, infrastructure and our natural environment.

Objective 3 – Health and welbeing

- Adapt the city's built and natural environment and prepare our residents to become more resilient to these changes. Increasing the amount and quality of green space to enable residents to benefit from the improved physical and mental health that will come as a result.

Objective 4 - Inclusive, zero carbon and climate resilient economy

- Ensure that Manchester establishes an inclusive, zero carbon and climate resilient economy where everyone can benefit from playing an active role in decarbonising and adapting the city to the changing climate.

1.3 Energy Statement

The proposed refurbishment of the Renaissance site on Deansgate will include significant performance upgrades to both the fabric and building services elements which will realise an expected carbon reduction currently envisaged to be between 30% and 40% but this shall be confirmed in the latter stages of the design process.

It is anticipated and targeted that the carbon reduction will be achieved as a result of the following upgrades:

Passive measures:

- Improved thermal performance of glazing, thus reducing heat loss from the windows by at least 50%
- Improved solar control of glazing, thus reducing cooling loads by circa 30%

Active Measures:

- A new modern lighting design using 100% Low Energy Light fittings in place of the existing lamps, which is expected to reduce lighting energy consumption by at least 40% and will also help to reduce summer time cooling loads by circa 5%
- A lighting control system to utilise the natural daylight levels in areas where this can be a real benefit to the scheme (offices, conference facilities etc) and timed circuit's for the activation of lighting through PIR and presence detection.
- Scene setting controls and ambient lighting to areas to reduce levels throughout the day to evening shall also look to be deployed to further reduce lighting levels and consumption overall obtaining a further 5% reduction in lighting energy.
- Modern split system fan coil units, which will typically reduce energy consumption over the current system by 30%
- Mechanical ventilation with heat recovery, which will improve heating and cooling energy consumption by an estimated 10%
- Modern, high efficiency domestic hot water generators and improved storage and distribution insulation which will reduce hot water energy consumption by between 20 and 30%.
- New mechanical services building management system which will integrate the use of the mechanical services plant in accordance with the occupancy demand which will reduce energy consumption by upto 15%.

The current EPC rating of the Hotel is unknown but for a building of this period would typically be an E or an F rating. It is likely that the refurbished building will have an improved EPC rating of C.