Renewable Energy Schemes

Lewes District is particularly vulnerable to the effects of climate change, and as such the Local Plan Part 1, The Joint Core Strategy seeks to address one of the leading causes of climate change, including reducing CO2 emissions. Efficient and sustainable energy use, both in new development and redevelopment, is one of the key areas that this can be achieved. It is estimated that 85% of the building stock that will be in use by 2050 has already been built, and so considering the future with every development is paramount. Core Policy 14 of the Lewes Local Plan states that the Local Planning Authority will "*Encourage renewable and low carbon energy in all development.*"

To ensure that this takes place, there has been a change in the Council's position following a motion passed at Full Council in July 2018[1], which requires that new housing, business and commercial planning applications to Lewes District Council (LDC) should usually include the provision of a 'Renewable Energy Scheme (RES).' The RES should seek to demonstrate how the planning proposal has considered energy usage in every aspect of the application, focusing on energy **Reduction**, **Efficiency** and **Generation (R.E.G)**.

Reduction – Does the application have design elements that will minimise the need for energy consumption?

- Does the layout of the proposed construction maximise the natural light, while avoiding shadows? Have light wells and skylights been considered? Are so many artificial light sources necessary?
- Has Microclimate analysis been conducted? Does the design take into account the wind direction? Could your design utilise this to reduce the need for powered ventilation?

Efficiency - When energy does have to be used, is it being done so in the most efficient way possible, with an absolute minimum of waste?

- Have the best materials for the development been considered? Could a change of materials improve the efficiency of the development?
- Has the design been made as energy efficient as possible? Are buildings designed in such a way they will share, and retain heat?
- Could they be equipped with smart meters? Is the proposed change a good chance to upgrade an outdated and inefficient heating system?
- If the home/commercial property will have built in appliances, will these be selected with energy efficiency in mind?

Generation - Is there any scope for the generation of energy on site from renewable sources?

- Is there scope for Solar photovoltaic tiles (Solar Panels), wind generated energy, ground source heat pumps etc?

[1] Effective from 1st September 2019, however a second motion is going to Full Council on the 25th February 2019 to bring forward the effective date to 1st April 2019.

- Could there be generation from Biomass, or Biofuels?
- Could waste generated on site be reused? Could an aspect of design make this easier?
- Are there already sources of renewable energy which could be used to power the development?

It is important that the RES that you produce is as viable as possible, and totally relevant to the application that accompanies it, and based on the scale of the development. How the scale affects what is required in the RES is detailed below. The questions above are examples of things that should be considered when creating the RES, and are in no way definitive. The Lewes Local Plan has an Energy Opportunities Map (Appendix 5 – Page 157), which was created as part of the Renewable Energy and Low Carbon Development Study, identifies the renewable and low carbon technologies that are most viable in different areas, and should be consulted to see what would be appropriate for your development. This does not preclude further site specific investigation to confirm feasibility, or preclude other options.

The RES that you include with the application could become binding as part of the application, if LDC includes it as a condition of any planning permission granted. This means that the delivery of the planning application can only happen if the RES is implemented.

Where your application is making minor adjustments, and you feel that the creation of a RES is not relevant; this needs to be explained as part of the RES 'breakdown' sheet which should be submitted with your planning application. If there are clear reasons why your development is not viable to incorporate aspects of **R.E.G**, this also needs to be made clear within.

Scale of Development	What should be included in the RES
-Change of Use with no physical alterations	Assess if the change of use will effect which area of the building is occupied and when Example -will this effect heating and lighting? Demonstrate how the proposed new use will change Energy use. What measures could be implemented to **Reduce** energy consumption as much as possible? Demonstrate if there a chance to increase **Efficiency.** Example - Will an outdated heating system suddenly get much more use? Could this be upgraded? Demonstration of viability
-Change of Use with physical alterations -Extensions and building alterations	As above. Demonstrate the alterations are using the best materials to increase the **Efficiency** of the whole building. Demonstrate how the design of the alteration will encourage the **Reduction** of energy use. Is there scope within the alteration to include any form of energy **Generation**? Example – A new extension may offer a new surface

	which is frequently in sunlight, and so will be suitable for Solar Panels.
-New Build – Residential and Commercial which are within currently built up areas and brownfield land.	Demonstration that the development will attain the BREEAM 'very good' standard (commercial). Description of where on the Energy Opportunities Plan within LDC the development is. Demonstration that the entire plan has been produced with consideration to energy **R.E.G**. in regards to design and materials. Demonstration of Viability.
-New Build - Residential and Commercial which may constitute a new estate, or covers a significant area of previously undeveloped land	As above. Demonstration that the application has been created while considering wider aspects of the Environment of Lewes District, which will affect the efficiency of the development – such as: Attaining heat from district heating networks; **Generation** of energy on scale suitable to the size of the development; Consideration of the transport needs of the people who will use the development and encouraging walking, cycling and the use of public transport. Demonstration of Viability.

RES 'Breakdown' Sheet

Question	Answer with explanation
Which area/s of the Energy Opportunities Map does the application cover?	
Have you produced a 'Renewable Energy Scheme' for the development and included it with the application?	
Is the 'Renewable Energy Scheme' considered viable?	
If the 'Renewable Energy Scheme' is made a condition of the planning permission, would you be able to implement it?	
Have these technologies been considered for inclusion in the development? • Solar water heating systems • Solar photovoltaic tiles • Generation from biomass or bio fuels • Wind generated energy • Heat pumps	
Have you considered other renewable technologies not listed above?	
Commercial elements only: What BREEAM standard will your development achieve?	