APPENDIX 3: CARBON DIOXIDE EMISSIONS AND ON SITE RENEWABLE ENERGY

National Context

In response to climate change the Climate Change Act 2008 requires a reduction in greenhouse gas emissions by at least 34% by 2020 and 801% by 2050 – below the 1990 baseline and the Government intend to deliver this by setting an meeting five-yearly carbon budgets for the UK for that period.

The Planning and Energy Act 2008 allows local authorities to set reasonable requirements in their local plans for:

- a proportion of energy used in development in their area to be energy from renewable sources in the locality of the development
- a proportion of the energy used in development in their area to be low carbon energy from sources in the locality of the development
- development in their area to comply with energy efficiency standards that exceed the energy requirements¹ of building regulations.

Local Context

Proposals for zero carbon development are strongly supported by the Council. The Council is committed to lowering carbon emissions and increasing the use of renewable energy and this is illustrated through:

- The Council leading by example on reducing energy carbon emissions, increasing energy efficiency and using renewable energy sources within its own stock of properties
- Building Futures: A Hertfordshire Guide to promoting Sustainability in Development: this guide is produced by the ten Hertfordshire local planning authorities and Hertfordshire County Council. It provides practical guidance for local authorities and developers and suggests possible solutions for energy efficient construction process, sustainable building materials and building operation, the use of sustainable approaches to design, increased renewable energy generation and water and waste management.

Policy Approach

The preferred approach is for reductions in carbon emissions to be met on site. This may be achieved through a combination of improved energy efficiency of the building fabric (above what is required by Building Regulations), on site low carbon and renewable technologies and/or connection to on site or off site heat networks or a combination of these measures.

In addition to lowering carbon emissions in new development, the Council recognises that it is crucial to address deficiencies within existing stock which is responsible for a significant volume of total carbon emissions: with the domestic sector accounting for 40% of total

¹ 'energy requirements', in relation to building regulations, means requirements of building regulations in respect of energy performance or conservation of fuel and power.

emissions within Hertfordshire. It is therefore vital that improvements are made to the existing stock in order to meet the Government's long term targets for the reduction in carbon emissions. The Council will support retrofitting of buildings for energy efficiency where planning permission is required.

POLICY: CARBON DIOXIDE EMISSIONS AND ON-SITE RENEWABLE ENERGY

a) Applications for all new residential development of one unit and above and for all new commercial development will be required to submit an Energy Statement demonstrating that development proposals will produce 20% less carbon dioxide emissions than Building Regulations Part L requirements (2013) having regard to feasibility and viability.

This may be achieved through a combination of energy efficiency measures, incorporation of on-site low carbon and renewable technologies, connection to a local, decentralized, renewable or low carbon energy supply.

Reasoned Justification

Policy X is critical to helping address climate change and reflects national policy and the local high priority to tackle this issues. Buildings such as houses and offices account for approximately 40% of all carbon dioxide emissions in the UK and the Council will encourage all new developments to be as energy efficient as possible.

The benchmark used for targets to reduce carbon emissions is the current Part L of the Building Regulations, in line with national policy and guidance. The requirement for applicants to submit an Energy Statement provides a reliable and consistent method of assessing the likely energy use and carbon dioxide emissions of a proposed development for developers and the Council.