

## D14 AN EXEMPLAR IN SUSTAINABILITY

### OBJECTIVES

- D14/a To include within Northstowe, projects which are an exemplar in terms of the use of the earth's resources, including energy, water and materials;**
- D14/b To minimise energy use in new development and reduce CO<sub>2</sub> and other greenhouse gas emissions which contribute to climate change;**
- D14/c To use energy efficiently;**
- D14/d To make greater use of renewable energy sources.**

### POLICY NS/26 An Exemplar in Sustainability

**Northstowe will include within the development exemplar projects in sustainable development, including energy efficient measures. This could be achieved by:**

- a) Providing an increased level of sustainability across the development as a whole above current requirements to a material extent;**
- b) Building a proportion of the development to advanced practice which fully addresses sustainability issues and minimises any environmental impact by pushing at the boundaries of the proven technology available at the time of the development.**

### Exemplar Projects

- D14.1** In addition to the application of the district wide policy at Northstowe, the Area Action Plan also requires the provision of exemplar developments at Northstowe which respond to the Structure Plan requirement that the development “will be an example of excellence in the creation of a sustainable settlement ... and will promote the Sub-Region as a leader in technological innovation.....”.
- D14.2** This aspiration could be met in various ways. It could ~~either~~ be achieved by a proportion of the development being built to advanced practice and pushing at the boundaries of technology. Alternatively, and potentially bringing a greater level of overall sustainability benefit, an increased level of sustainability above current requirements could be provided across the whole development. This would need to be at a level that was materially higher than could ~~reasonably~~ normally be required of the development. This approach would have the

advantage of bringing benefits to a wider number of people and promote more effectively the principles of sustainable development.

### Energy Provision

- D14.3 The Structure Plan envisages that Northstowe will be an “example of excellence in the creation of a sustainable settlement” (Policy P9/3).
- D14.4 A major development of the scale of Northstowe, and the fact that it will be a freestanding new settlement, enhances the potential for a comprehensive approach towards the provision of energy. It offers the opportunity for innovative measures, including the use of renewable energy. Policy NE/3 of the Core Strategy and Development Control Policies DPD requires the provision of technology for renewable energy to provide at least 10% of predicted energy requirements.
- D14.5 The recent report “Delivering Renewable Energy in the Cambridge Sub-Region 2004” by Energy for Sustainable Development with Global to Local Ltd for Cambridgeshire County Council, Cambridge City Council, and South Cambridgeshire, East Cambridgeshire and Huntingdonshire District Councils assessed the potential and capacity at the major development locations proposed in the Structure Plan to implement renewable energy systems. It identified that Northstowe offers the greatest technical potential for incorporating a range of renewable energy sources, including photovoltaic energy (PV), solar, thermal, biomass and wind. It also suggests that it is likely to have the greatest potential for planned development of infrastructure, such as heat grids and private ~~and~~ wire electrical networks needed to provide energy independently of the National Grid.
- D14.6 The District Council, in partnership with Cambridgeshire Horizons and the Energy Savings Trust, is carrying out a study of opportunities for generating some of the town’s own energy needs by harnessing renewable energy. As part of this work, the potential for setting up an Energy Supply Company (ESCO) for Northstowe is being considered. The aim is to achieve a forward thinking approach to maximising renewable energy provision in the new town.

### Energy Efficiency and Conservation

- D14.7 Similar considerations apply to energy efficiency and energy conservation as to energy provision. The Core Strategy and Development Control Policies DPD includes Policy NE/1 which seeks a high level of energy efficiency and energy conservation measures in all new development. It requires a high degree of measures to increase the energy efficiency of new buildings through, for example, location, layout, orientation, aspect, internal and external design and the use of improved insulation. It also encourages developers to reduce the amount of CO<sub>2</sub> m<sup>2</sup> / year emitted by 10% compared with the minimum Building Regulation requirement. Applying this policy at the

new town will help ensure that the performance of Northstowe over the long period of its implementation will always remain challenging and forward thinking.

#### Water Conservation

- D14.8 Policy NS/23 in the Land Drainage and Water chapter seeks at least a 25% reduction in the use of piped water compared to the average water consumption for development which does not have water conservation measures whilst managing the recycling of water to ensure no adverse impact on the water environment and biodiversity. Within Northstowe there will be exemplar projects in sustainable development in response to the Structure Plan policy. Improvements upon the standards for water conservation would contribute towards such exemplar projects.

#### Materials

- D14.9 The Core Strategy and Development Control Policies DPD Policy DP/1 criterion 5 suggests, where practicable, the use of sustainable building methods and verifiably sustainable, locally sourced materials, including recycled materials, and the inclusion of a Travel Plan to address the needs of labour during construction. ~~In an exemplar project, making~~ Making these matters integral to the development would contribute towards exemplar projects.