



Energy

Topic Paper No 15 – Summary

Introduction

Energy generation is a key issue in that it contributes to CO₂ emissions which are known to cause climate change and it is widely acknowledged that there are likely to be issues in ensuring a consistent supply in the future. There are two aspects that need to be considered:

Energy use

- It is important to reduce CO₂ emissions by reducing the amount of energy used

Energy generation

- It is important to have a sustainable form of energy generation and a consistent supply for communities in order to meet the needs of existing and future residents and businesses, as well as protecting the environment.

The impacts of climate change are already obvious and as well as reducing the emissions which contribute to climate change through a reduction in energy use and increased use of renewable energy, there are concerns over the location of infrastructure. Climate change is likely to cause increased extreme weather events and it is important that energy sources and the associated infrastructure are located where they are less likely to be affected, and are designed with these potential problems in mind.

Current renewable energy sources include:

- Onshore wind
- Off shore wind
- Tidal energy
- Wave energy
- Solar photo-voltaic

- Solar thermal
- Biomass
- Combined heat and power (CHP)
- Anaerobic digesters
- Ground source heat pumps
- Air source heat pumps
- Bio-fuels
- Hydro power
- Landfill gas

It is important to note that it is not just the technologies themselves that need to be considered within the LDP, but the associated infrastructure can also have planning implications.

Context

The impacts of climate change and the expected reduction in oil production mean that renewable energy sources need to be developed. This is widely acknowledged in European and National guidance, strategies and targets. As a result there are important influences on energy policy and strategy and these need to be incorporated into policies at a local level and inform the development of LDP policy. EU guidance issued in January 2014 sets a target of a 40% reduction in greenhouse gas emissions compared to 1990 by 2030; a target of 27% renewable energy production; and energy efficiency to play a vital role, although no target has been set. The 2008 Climate Change Act sets a target for the UK of a reduction in greenhouse gas emissions of 80% by 2050.

The LDP can identify sustainable locations for the development of renewable energy technologies,

and can also require new development to reduce energy use through the incorporation of energy efficiency methods and renewable technologies.

Welsh Government advises in Planning Policy Wales para 12.9.2 that 'local planning authorities should guide appropriate renewable and low carbon energy development by undertaking an assessment of the potential of all renewable energy resources and renewable and local carbon energy opportunities within their area and include appropriate policies in development plans'.

Energy is a topic which is vital to the overarching theme of sustainable development. It can also impact on other key aspects of the LDP in relation to the following:

- Infrastructure
- Employment opportunities
- Agriculture
- Landscape
- Built and natural environment
- Energy Efficiency
- Design

The Role of the Plan

The LDP needs policies which will assist in reaching national targets for reducing CO2 emissions and encouraging renewable energy production.

However a balanced approach is needed that integrates social, economic and environmental issues. This will require policies and proposals that:

- Mitigate the causes of, and adapt to, the impacts of climate change
- Encourage small scale renewable energy developments close to where the energy is needed
- Seek to direct larger scale renewable energy developments to appropriate locations
- Identifying those areas considered appropriate for large scale renewable energy developments
- Seek to protect the landscape, built and natural

environment

- Promote agricultural diversification and protect agricultural land e.g. through energy from waste technologies or through renewable energy generation
- Ensure that new development incorporates appropriate energy efficiency measures, including requiring appropriate site layouts
- Require well designed development

Given the nature of renewable energy technologies, it will be often be necessary to balance the differing issues and the LDP will seek to provide guidance on this.

Key Plans and Strategies

- EU Energy Strategy 2020 (2011)
- EU Energy Roadmap 2050 (2011)
- EU Energy Efficiency Directive (2012)
- EU Green Paper – A 2030 Framework for Climate and Energy Policies
- Climate Change Act (2008)
- Building Regulations (Wales)
- Climate Change Strategy for Wales (2010)
- One Wales: One Planet – the Sustainable Development Scheme for Wales (2009)
- Energy Wales: A Low Carbon Transition (2012)
- Bioenergy Action Plan for Wales – Progress Report (2012)
- Planning Policy Wales, Edition 6, 2014
- Town and Country Planning (General Permitted Development) Order 1995 (as amended 2013 - Wales)
- Planning Implications of Renewable and Low Carbon Energy – Practice Guidance (Welsh Government, 2011)
- Planning for Renewable and Low Carbon Energy – A Toolkit for Planners (Welsh Government, 2010)
- TAN8 Renewable Energy (2005)
- TAN12 Design (2012)
- TAN22 Sustainable Buildings (2010)

Issues to be addressed by the Plan

- Improving energy conservation and efficiency
- Contributing to national and international targets for reducing CO2 emissions
- Encourage appropriate renewable energy schemes
- Identifying suitable areas for large renewable energy schemes, including employment and industrial areas
- Consideration of the cross boundary issues in relation to large scale renewable energy schemes
- Ensure that all development takes into account the historic built environment, landscape, nature conservation and amenity interests
- Incorporation of renewable energy technology within new developments
- Identifying whether it is appropriate for 'strategic' renewable energy development to be provided for, informed by a renewable energy assessment.

- Protection of the historic and cultural landscape
- Protection of the natural environment

Potential Land Use Policies / Proposals

The UDP contained a strategic policy on Resources and five key relevant policies in Chapter 19 which related to sustainable / renewable energy generation and energy efficiency.

It is proposed that the key policies and proposals in the LDP are broadly along the lines of:

- Sustainable design in new development
- Sustainable design in the sympathetic adaptation and re-use of buildings
- Resource efficiency and energy use
- Energy generation and location of related infrastructure
- Renewable energy generation
- Locating and facilitating new large scale renewable energy projects
- Protection of existing renewable energy schemes