



The countryside charity
Gloucestershire

Change is inevitable: it should be for the better

POLICY STATEMENT ENERGY

Summary of policy position

This policy statement relates to electricity generation, fracking for gas and oil, coal bed methane extraction, and deep seam exploitation of coal deposits for underground coal gasification.

We need energy to live. To minimise demand for energy while maintaining living standards, the highest priority needs to be given to reducing energy consumption through energy conservation measures and careful design of new buildings.

Renewable energy technologies which are constantly available and flexible in operation are preferable to those which generate power intermittently. Continuous power technologies are scalable and suitable for local schemes. In general, we support smaller scale renewable energy generation rather than major centralised facilities.

We discourage local planning authorities from basing renewable energy strategies on wind power because in most cases, on the basis of environmental cost versus benefit, the visual damage to the landscape would be unacceptable.

There is greater potential for solar power, particularly roof-mounted installations when an integral part of a new development. We will consider proposals for solar arrays on a case by case basis taking into account issues such as scale, visual impact and land quality.

We are opposed to the idea of local authorities designating suitable areas for renewable energy because the impact on the landscape can only be judged on an individual very localised basis.

For major new high voltage electricity lines, upgrading existing routes should be the first option. We will seek to ensure that proposals for a new route demonstrate that it is the best alternative and aligned to minimise visual impact, and in particularly valued landscapes the alternative of undergrounding has been properly evaluated.

We are not opposed in principle to the transitional generation of shale gas or oil through fracking, coal bed methane extraction, or to deep seam exploitation of coal deposits for underground coal gasification (UCG), but currently we have unresolved concerns over the risks associated with these unconventional fossil fuels processes. Emerging national CPRE policy is to seek a moratorium on the approval of further fracking applications until our concerns have been allayed.

Introduction

The provision of reliable sources of all forms of energy is vital to living standards and to the vitality of the country and the countryside. All forms of energy need considerable infrastructure for their production and transportation to consumers. However, from a Gloucestershire point of view the important issues concern electricity and, potentially in the future unconventional fossil fuel activities involving fracking for gas or oil, coal bed methane extraction, and underground coal gasification (UCG).

This is because the infrastructure for transport fuels is already in place and it is unlikely to need expanding; the issues concern more the infrastructure of transport such as roads and airports than of the fuel. Similarly, with the completion of the Wormington to Sapperton pipeline it is unlikely that further major projects for gas transmission will occur in the county for some while; there are however valuable lessons to be learnt from that project should any new pipeline be proposed, for instance as part of unconventional fossil fuel projects.

There are currently no large electricity power stations (either fossil fuel or nuclear) in the county, nor is it likely that there will be in the foreseeable future. However, should fracking for gas or other unconventional fossil fuels proceed there will be the need for significant additional industrial facilities to enable extraction and chemical processing, and infrastructure developments to enable distribution of either gas or electricity into the respective grid.

The issues which are most pressing concern:

- encouraging measures to save energy or to use it more efficiently;
- renewable energy projects in all their forms;
- the potential for new transmission lines from major new generation sources such as nuclear power stations, and offshore wind farms in the Bristol Channel;
- the limited use to which farm land that has been utilised for PV solar farms can be put, set against the need to maintain food production;
- for unconventional fossil fuels, the need for on surface industrial scale chemical processing and treatment facilities and product transportation arrangements, either via pipelines or by road.

CPRE Gloucestershire supports the need to take seriously the probability of climate change due to continuing emissions of greenhouse gases (GHGs). However, it is also true that this is a problem which can only be tackled by a concerted effort globally. Even if the UK were to meet its challenging targets to reduce GHG emissions, it would contribute less than 1% of the reductions needed globally. We therefore believe that the pursuit of renewable energy targets should not be at the expense of the unique environmental assets of landscape and biodiversity in the county. This view has been reinforced by a high court judgement that environmental damage could not be outweighed by contributing generation of renewable energy to meet the government's policy aspirations.

This policy statement does not cover climate change per se. CPRE's position is fully expressed in Planning for Climate Change Guidance published in April 2012 by a wide consortium of non-governmental organisations.

What the National Planning Policy Framework says

In planning terms, the key national policy statements on energy are contained in the revised National Planning Policy Framework (NPPF) published in July 2018.

In summary, the NPPF:

- states that the planning system should support the transition to a low carbon future in a changing climate.....It should help to shape places in ways that contribute to radical reductions in greenhouse gas emissions..... and support renewable and low carbon energy and associated infrastructure (paragraph 148);
- requires new development to be planned in ways that can help reduce greenhouse gas emissions such as through its location, orientation and design and by application of the Government's technical standards for the sustainability of buildings (paragraph 149);
- requires that through plans local planning authorities should consider identifying suitable areas for renewable and low carbon sources and supporting infrastructure; and identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers (paragraph 151);
- requires local planning authorities to encourage community-led initiatives for renewable and low carbon energy, including in areas outside areas identified in local plans (paragraph 152);
- on oil, gas and coal exploration and extraction, the NPPF requires minerals planning authorities to recognise the benefits of on-shore oil and gas development, including unconventional hydrocarbons, for the security of energy supplies and supporting the transition to a low-carbon economy; and to put in place policies to facilitate their exploration and extraction (paragraph 209).

CPRE Policy

Against the above background our policies are:

a) The highest priority should be given to reducing energy consumption

In the UK, one quarter of all carbon dioxide emissions come from energy used to heat and light homes, and to power household appliances. We support public awareness campaigns that encourage energy conservation in the home. Reducing the energy wasted in homes can have a direct beneficial effect on the environment as well as saving consumers money, and this approach needs to be extended to public, commercial, and industrial buildings.

Public authorities should be set ambitious targets for reducing energy consumption.

Energy conservation measures should be widely promoted in all buildings, for example through careful design and orientation of new buildings to maximise solar gain in the winter and minimise it in the summer, by the use of construction materials with good thermal efficiency, and through better insulation.

Developers should be encouraged to produce sustainability audits, and lifetime carbon emissions from developments should be considered within the planning process.

We believe these aspirations can be achieved by insisting that local planning authorities implement the provisions of the NPPF in their plans and decisions. We will also encourage local communities to develop renewable energy strategies as part of neighbourhood plans or other community planning activity.

b) The choice of renewable energy technologies

The Government has an obligation to ensure that electricity is provided at all times. This can only be achieved by technologies which are constantly available to generate electricity and are flexible in operation to accommodate fluctuations in demand. There is therefore a crucial difference between those renewable technologies which are constantly available and those which generate power intermittently. There is a place for the latter but to a more limited degree than current Government policy and incentives imply. This may change if battery technology or other electricity storage methods improve; but at the moment batteries are expensive, unreliable and limited in capacity. We therefore suggest that the priorities in Local Plans for renewable energy technologies should be:

1) Constantly available:

- i) Anaerobic digestion (AD). AD systems are being used increasingly as a source of renewable energy. The process produces a biogas which can be used directly as fuel and in combined heat and power plants or upgraded to natural gas-quality bio-methane. A by-product is a nutrient-rich digestate which can be used as a fertilizer. This technology can work very effectively in agriculture, and in the treatment of sewage and food wastes. On farm digesters typically use manures and slurry as feedstock but this can be supplemented with plant material, usually maize.

We support the development of this technology, subject to satisfactory siting, design of the processing plant and that the source of feedstock is local. In addition to farm applications the technology is best applied in community or relatively small town schemes. We are likely to oppose large schemes which rely on bringing in feedstock from more distant areas; these schemes are very often visually intrusive and generate excessive traffic for the local road network. We also have concerns over farm schemes which solely use plant material grown specifically as feedstock, diverting use of land away from food production.

- ii) Ground/water source and air source heating. To be encouraged in new buildings.
- iii) Energy from waste. We support the diversion of waste from landfill and the use of residual waste for the generation of energy and are not opposed to incineration or other combustion processes that can be demonstrated to have insignificant environmental impact. However we do not support investment in very large-scale facilities (see our Policy on Waste Planning and Management for a full statement on our policy in this area).
- iv) Hydro. There is a limited potential for small scale schemes to harness the energy of our local rivers.

- v) Biomass. The burning of wood or other biomass crops such as miscanthus is usually associated with combined heat and power generation. Great care needs to be taken to ensure that benefits are not lost in transporting feedstock long distances or that excessive planting of biomass crops does not create a monoculture alien to the farmed landscape. To avoid this, we do not support investment in large scale burning of wood or other biomass crops. Any significant increase in the use of land for biomass production would also reduce the area available for producing food. However, more use of local wood fuel for heating can encourage better management of existing woodland with landscape and biodiversity benefits. So long as management is sensitive and there is no risk of loss of ancient woodland or a permanent reduction of afforested areas, greater use of **local** wood fuel is supported.

All the above technologies are scalable and are particularly suitable for local smaller scale schemes. In general, we support smaller scale renewable energy generation rather than major centralised facilities – though scale will be determined by technology, the availability of feedstock and the size of the local demand for power/heat.

2) Intermittently available

- i) Wind power. In Gloucestershire it is now apparent that there is limited scope for wind turbines without unacceptable visual damage to the landscape both for large and relatively small turbines. We will therefore discourage local planning authorities/communities from basing their renewable energy strategies on wind power. Any proposals would need to be judged on their individual merits and be subject to clear assessment of their visual effects.
- ii) Solar. In contrast to wind power, we consider there is greater potential for solar power in carefully selected locations. Some panels are reflective or visually intrusive, and a key issue is the impact of solar arrays in the landscape, particularly when viewed close-to or from high ground. For roof-mounted solar panels there are a number of different panel designs and not all are suitable for prominent positions. We will lobby for inclusion in plan policies of a requirement to choose the best design for the particular situation. However, most domestic applications are now permitted development.

Visually, it is more satisfactory to incorporate solar thermal and photo voltaic systems as an integral component of new development and this should be encouraged and good practice promoted. CPRE has produced two good practice guides: detailed good practice guidance aimed primarily at designers, manufacturers and installers of PV systems; and a short guide, in the form of 10 design tips, primarily aimed at homeowners. Both guides can be viewed and downloaded from the Branch website.

We will encourage Gloucestershire's local authorities to make use of Article 4 Directions to bring roof-mounted solar panels under planning control where solar panels would be particularly detrimental to the character of the area.

We will consider proposals for solar arrays on a case by case basis. Solar arrays can be difficult to accommodate satisfactorily in the rural landscape and potentially take farmland out of production. In assessing proposals we will consider issues such as scale, visual impact individually and cumulatively, land quality and restoration of the site at the end of the life of the project.

- iii) Tidal power. The Severn Estuary has long been identified as a potential source of tidal power. Revived proposals for a Severn Barrage look unlikely to be taken further but there is the prospect of the construction of a series of tidal lagoons (the first such project in Swansea Bay has development consent) and other, larger scale projects off Cardiff, Newport and in Bridgwater Bay have been mooted. The Government review of the economics of tidal lagoon power (the Hendry Review) has recommended proceeding with the Swansea Bay project as a pathfinder project. We will monitor the situation but would be opposed to schemes which individually or cumulatively would do irreversible and significant damage to the environment and unique ecology of the River Severn. If the Swansea Bay lagoon goes forward environmental impacts should be fully assessed over a number of years before further projects are proceeded with.

c) Landscape and renewable energy

The landscape in Gloucestershire is fine-grained. Its ability to absorb any sort of development including renewable energy can only be judged on a very localised basis. We are therefore opposed to the idea of local authorities designating suitable areas for renewable energy and instead will seek to persuade them to develop criteria based policies including localised landscape character assessment rather than attempt to identify particular areas as suitable for renewable energy. In June 2015, however, the Government advised local authorities that planning permission for wind turbines should only be granted if the site is in an area identified as suitable for wind energy as part of a Local Plan or Neighbourhood Plan and the project addresses planning impacts identified by affected local communities and therefore has their backing.

For all proposals, special care is needed in AONBs and within their setting. The NPPF, paragraph 116, says that planning permission should be refused for major developments in these designated areas, except in exceptional circumstances and where it can be demonstrated they are in the national interest.

d) Transmission

The visual impact of major transmission lines is among the most damaging aspects of the electricity industry. We will seek to ensure that any proposals for transmission lines through Gloucestershire can demonstrate that:

- the route is the best alternative. We will oppose any routes through the Cotswolds or Forest of Dean
- routes are aligned to minimise visual impact
- the recent new electricity pylon designs are considered
- upgrading existing routes should be the first option
- where the visual impact would affect a wide area and/or particularly valued landscape, that the alternative of undergrounding has been properly evaluated giving due weight to environmental damage.

For minor transmission lines we will expect electricity distribution companies to have fully used the allowance they have for undergrounding and do so in sensitive areas. We will lobby for them to look favourably on undergrounding existing lines.

e) Unconventional Fossil Fuels

In August 2015 the Government awarded licences for unconventional oil and gas exploration in 27 areas. A further 132 areas could also be awarded licences subject to satisfactory environmental assessment. The main objective of exploration is to test the potential to supply gas from shale, which would be extracted through fracking, for coal bed methane extraction, and for underground coal gasification (UCG). Four of these areas lie wholly or principally within the Forest of Dean for the capture of methane from abandoned coal seams and these have been deemed not to be viable by the licencees. At present no potential areas for fracking have been identified in Gloucestershire. It is therefore very unlikely that proposals will be coming forward in the foreseeable future for the exploitation of unconventional fossil fuels.

Based on the information available at present, CPRE does not oppose the exploitation of shale gas in principle but has major currently unresolved concerns over the risks associated with both fracking for gas and extraction of other unconventional fossil fuels. The emerging national CPRE policy is therefore to seek a moratorium on approval of further fracking planning applications until it can be demonstrated that the technology will contribute positively to meeting climate change targets, not lead to cumulative harm to special landscapes and can be properly controlled by regulation and planning processes.

CPRE Gloucestershire is a party to the national policy. However, should government not introduce a moratorium and in the unlikely event that a planning application came forward our primary aim would be to ensure that the location, design and operation of shale gas and other unconventional fossil fuel sites, and the applied methods of extraction, do not harm the present beauty, ecology, and tranquillity of the countryside, prevent promotion of its enhancement, or prove harmful to the health and well-being of both residents and visitors; and that all directly or indirectly associated sites and their surroundings are fully restored when production ceases. We would also be concerned to ensure that the natural resources of the countryside, especially water, are not polluted or used unsustainably. We will oppose any development proposals which fail to meet these conditions.

f) Gas or other pipelines

The experience of the Wormington to Sapperton gas pipeline is that with good planning and management there need be no lasting impact on the landscape. National Grid Gas was congratulated for the high standards they applied on this project and we will use this as the benchmark for any future projects. An issue is the location of compression or decompression stations and similar installations. These are few but involve large plant which needs to be sensitively sited and screened.

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CPRE Gloucestershire Policy Statements are regularly reviewed and updated as necessary. They should be read as a set.