

Change is inevitable: it should be for the better

# POSITION STATEMENT 8 ENERGY PRODUCTION

This position statement should be read in conjunction with our Climate Change position statement.

#### **SUMMARY**

The current main issues in Gloucestershire concern electricity generation capacity and the distribution of electricity. We anticipate that Gloucestershire will continue to depend on major generating plant outside the county and local energy generation is unlikely to meet other than a small proportion of the county's electricity demand for the foreseeable future.

Subject to their acceptable impact on the environment, in Gloucestershire we support small scale dispersed energy generation facilities; those renewable energy technologies which produce energy continuously; and solar installations on roofs or in carefully sited arrays. We are of the view that there is only limited scope for wind turbines in Gloucestershire without unacceptable adverse impacts on the landscape.

#### 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. However, how energy is produced and consumed now needs to be considered in the context of the Government's legal commitment that requires the UK to bring greenhouse gas emissions to net zero by 2050.

We fully support the need to take full account of the certainty of significant climate change as a result of continuing emissions of greenhouse gases. However, we consider that the pursuit of renewable energy targets should not be at the expense of the county's unique environmental assets of landscape and biodiversity, or the food productive capacity of its agricultural land.

For Gloucestershire the most important short-term issues concern electricity supply. Less than 15% of Gloucestershire's electricity needs are met from generation within the county and local generation is unlikely to meet other than a small proportion of the county's electricity demand for the foreseeable future.

In the longer term, development of nuclear technology such as fusion or small-scale reactors could influence where generation capacity is located and how it is distributed in the county; and we are aware that under the title Severn Edge, the former Berkeley and Oldbury-on-Severn nuclear sites have been shortlisted as a possible location for a prototype nuclear fusion plant.

## What the National Planning Policy Framework says

In planning policy, the key national statements on energy are contained in the July 2021 updated National Planning Policy Framework (NPPF) in paragraphs 155 and 156:

"To help increase the use and supply of renewable and low carbon energy and heat, plans should:

- a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);
- b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development;
- c) 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.

Local planning authorities should support community-led initiatives for renewable and low carbon energy, including developments outside areas identified in local plans or other strategic policies that are being taken forward through neighbourhood plans".

## An Energy Strategy for Gloucestershire

In February 2019 Gloucestershire County Council adopted an Energy Strategy. We welcomed this, not least how it encourages businesses in the county to exploit the commercial opportunities offered by renewable energy solutions to power generation, but we are concerned that its heavy emphasis on the generation of renewable energy may push District Councils towards affording renewable energy projects priority over the protection of the landscape or built heritage.

# **CPRE Gloucestershire Policy**

We hold that the highest priority should be given to reducing energy consumption including the very important issue of raising the standard of insulation in new built housing and retrofitting existing buildings to meet the highest standards of energy efficiency. This is addressed in our <u>Climate Change Position Statement</u>.

Other than this our policies are:

### The choice of renewable energy technologies

1. The focus should be on dispersed small-scale facilities generating power on a continuous basis.

We support the use of the following technologies with some caveats:

i) Anaerobic digestion (AD) - the process by which agricultural waste manure, slurry, and plant material is turned into biogas and nutrient rich biofertiliser. In turn the

biogas can be used as fuel for heat or electrical power generation. Subject to satisfactory siting It is well suited to small scale installations on farms and at sewage treatment works. But we are likely to oppose large schemes which rely on bringing in feedstock from more distant areas, not least because large schemes are very often visually intrusive and generate excessive traffic for the local road network. We are also opposed to farm schemes where the majority of the land is converted solely to supply the biodigester at the expense of food production.

- ii) Energy from waste incineration. We support the diversion of waste from landfill to the generation of energy, particularly electrical. Hence, we are not in principle opposed to incineration or other combustion processes that can be demonstrated to have insignificant environmental impact. However, for now in Gloucestershire, with the massive Javelin Park energy from waste incinerator commissioned, we view any further such plant in the county unnecessary and indeed unlikely.
- iii) **Hydro**. Other than tidal related, there is a limited potential for small scale schemes to harness the energy of our local rivers through electricity generation.
- iv) **Biomass.** The burning of wood or other biomass crops such as miscanthus is usually associated with combined heat and power generation, but 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 reduce food production or 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 over food growing. However, more use of local wood fuel for heating can encourage better management of existing woodland with landscape and biodiversity benefits, and so long as management is sensitive and there is no risk of loss of ancient or semi natural woodland, or a permanent reduction of afforested areas, greater use of local wood fuel is supported.
- 2. Technologies which provide intermittently available electricity should play a less significant role in Gloucestershire because economies of scale may be required to make them commercially viable, leading to conflicts with the County's sensitive landscape attributes.
  - i) Wind power. In March 2020 the Government reversed its position and indicated strong support for on-shore wind power electricity generation. However, we believe that there is limited scope for wind turbines both large and small in Gloucestershire without unacceptable adverse impacts on the landscape and wildlife. Government policy will therefore have to be very selectively applied. We will judge all proposals on their individual merits including an assessment of their visual effects, and cumulative impacts.
  - ii) **Solar**. In contrast to wind power, we consider there is greater potential for solar power. CPRE advocates a locational hierarchy for solar power installations with a strong focus on 'roofs first'
    - Where practical, all new build domestic, commercial and industrial development should include the provision of solar power installations, both photovoltaic (PV) and

heat; and retrofitting of existing buildings should be strongly encouraged. We will press for appropriate policies in Local Plans.

In addition, more use of urban, brownfield and peri-urban sites for solar energy would have distribution and transmission benefits and would also improve the carbon efficiency of development.

We will consider proposals for solar PV arrays in rural areas on a case-by-case basis. Except on some farm buildings, such arrays can be difficult to accommodate in the rural landscape and potentially take farmland out of food production. In assessing proposals, we will consider issues such as scale, visual impact individually and cumulatively, agricultural land quality, the impact on food production, and the provisions programmed for restoration of the site when the facility ceases operation. Where arrays can be accommodated satisfactorily, approved developments must deliver biodiversity net gain and contribute to Local Nature Recovery Strategies. We will press strongly for local planning authorities to insist that applicants submit a request for a screening opinion in making a planning application for any such development on a large scale, and for full Environmental Impact Assessment where appropriate.

Solar panel design is another important consideration. Not all panel designs 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.

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 CPRE Gloucestershire website. We will also 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 an area.

It seems likely that technological improvements may render battery storage more economically viable, and large-scale installations could become a part of solar array (and wind turbine) proposals. We will seek to ensure that such installations are suitably sited and well screened from public view.

Tidal Power. The Severn Estuary has long been identified as a potential source of tidal produced electrical power. To date all proposals have proved both ecologically and economically non-viable. But should it become apparent that the government's legal commitment to achieving net zero greenhouse gas emissions by 2050 cannot be met without exploiting the tidal resources of the Severn Estuary, we will oppose a complete Severn barrage; but would likely look more favourably on proposals for tidal lagoons where they can be located without damage to the estuary's unique ecology.

We note that a Swansea Bay lagoon has development consent but is stalled, and that the Government review of the economics of tidal lagoon power (the Hendry Review) in January 2017 recommended proceeding with the Swansea Bay project as a pathfinder project. If the Swansea Bay lagoon does go forward it is our stance that environmental

impacts should be fully assessed over a number of years before further similar projects are proceeded with.

# 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 projects 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 development.

In June 2015 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 has their backing. This guidance still stands but could be used to push for the identification of suitable areas – we will oppose any proposal which has not fully taken into account the impact on the wider landscape.

For all proposals, special care is needed in AONBs and within their wider setting. The NPPF, paragraph 177, 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. We support that approach.

### **Electricity Transmission**

The visual impact of major power transmission lines is among the most damaging aspects of the electricity industry. We will oppose any proposed new high voltage transmission line routing through the Cotswolds or Forest of Dean, and we will seek to ensure that any proposals for new transmission lines through Gloucestershire can demonstrate that:

- upgrading existing routes has been fully explored
- the new route is the best alternative
- routes are aligned to minimise visual impact
- the recent new T-pylon design is considered. (Selected from designs submitted through an international competition, T-pylons have a single pole and cross arms. They are a third shorter than the traditional lattice pylons, and occupy far less land)
- Where the visual impact would affect a wide area and/or particularly valued landscape, the alternative of undergrounding has been properly evaluated giving due weight to environmental damage.

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

## **Unconventional Fossil Fuels**

In 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 was to test the potential to supply gas from shale, which would be extracted through fracking. Also of interest was the potential for coal bed methane extraction, and for underground coal gasification (UCG). Four of the areas where licenses were awarded lie wholly or principally within the Forest of Dean. These areas have been deemed non-viable by the licencees, and at present no potential areas for fracking have been identified in Gloucestershire.

We consider it very unlikely that further proposals will come forward for the exploitation of unconventional fossil fuels in Gloucestershire for the foreseeable future. Additional background is in an annex to this statement.

## 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.

## **Updated February 2022**

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

#### **Annex**

## **Fracking**

In August 2019 the government suspended operations at the only developed fracking site in the UK because of persistent local earth tremors. In November 2019 the Oil and Gas Authority study into the causes was published; it concluded that it was not possible with current technology to accurately predict the probability of tremors. In the light of this report the government announced a moratorium on any further fracking until compelling new evidence is provided. The Government also withdrew proposals to change planning regulations to allow fracking proposals to be fast tracked.

This was consistent with national CPRE policy which sought a moratorium on approval of further fracking planning applications. However, CPRE takes a rather broader approach on the issues which need to be addressed viz: it must 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.