

## **BAGNALL PARISH COUNCIL**

### **REPORT TO THE PARISH COUNCIL ON THE CONSULTATION WITH PARISHIONERS ON CLIMATE CHANGE / APPLICATIONS FOR SOLAR PANAL AND BATTERY STORAGE FACILITIES BY THE CLERK**

#### **Report Purpose**

Bagnall is a small Parish that sits within the Staffordshire Moorlands. The centre of the village is deemed a conservation area, and is surrounded by open fields, mostly used for agriculture, and is adjacent to designated Sites of Special Scientific Interest (SSSI) and Areas of Outstanding Natural Beauty (AONB).

The Parish Council has been made aware that some of these open spaces are being looked at for the purpose of solar panel installations, and Councillors felt it important that any decisions on whether to support or challenge any installation planning applications proposed within the Parish should be led by the community they represent.

#### **Climate Change – The Facts**

Earth's climate has changed throughout history. Just in the last 650,000 years there have been seven cycles of glacial advance and retreat, with the abrupt end of the last ice age about 11,700 years ago marking the beginning of the modern climate era — and of human civilization. Most of these climate changes are attributed to very small variations in Earth's orbit that change the amount of solar energy our planet receives.

The current warming trend is of particular significance because it is unequivocally the result of human activity since the mid-20<sup>th</sup> century and is proceeding at a rate that is unprecedented over millennia. Most of the warming occurred in the past 40 years, with the seven most recent years being the warmest.

The ocean has absorbed much of this increased heat, with the top 100 meters (about 328 feet) of ocean showing warming of more than 0.6 degrees Fahrenheit (0.33 degrees Celsius) since 1969. Earth stores 90% of the extra energy in the ocean.

Since the beginning of the Industrial Revolution, the acidity of surface ocean waters has increased by about 30%. This increase is the result of humans emitting more carbon dioxide into the atmosphere and hence more being absorbed into the ocean. The Greenland and Antarctic ice sheets have decreased in mass and global sea level rose about 8 inches (20 centimetres) in the last century.

The number of record high temperature events has been increasing, while the number of record low temperature events has been decreasing, since 1950. Many countries have also witnessed increasing numbers of intense rainfall, wind and forest fire events.

## **How we fix climate change**

Governments around the world met in Glasgow in early November 2021 under the COP26 umbrella to discuss means of alleviating the effects of humans on the earth and several options were put forward, the most important of these was Carbon Tax.

Carbon taxation (and similar arrangements) aims to increase the price of carbon to reduce domestic fossil fuel CO<sub>2</sub> emissions thus incentivising energy producers to go 'green' by directly taxing emissions and encouraging more industries and households to switch energy as renewables will be comparatively cheaper.

Electrification – once deemed a 'dirty' energy source derived from fossil fuels – seems to be the favoured option of the Government to provide sustainable decarbonisation of energy provision in the UK. As the world develops and populations increase, energy demands will rise and therefore an affordable, efficient, and zero-carbon energy supply is vital for our daily lives.

Sourced from renewables, electricity will be needed to take on an increasing role in worldwide transport, heating, cooling, industry and building construction. Grids will need to be reinforced, extended and adapted to new loads and capacity, with renewable electricity generation expected to grow from 25% to 85% of total electricity production by 2050.

## **Renewable Energy**

'Renewable' energy is a source of power that can be traced back 2000 years to the invention of the waterwheel. Unlike fossil fuels which need to be drilled, burned, and mined from the earth, it will never deplete.

Renewable energy can take many forms including hydropower, solar power, wind energy and anaerobic digesters (energy from food and bacteria). We can even generate energy from our own rubbish; waste that is non-recyclable can be broken down and burned to create power. Hydropower sits at the number one spot, followed by wind and solar energy.

The UK is particularly suited for wind turbines because it's so windy, its north-western position means there is a constant gust to keep the turbines moving, with Scotland sitting in the breeziest position. Therefore, in the UK, wind power is the most harnessed source of green energy.

The sun has been producing solar power energy for millions of years. It literally brings life to our earth. Without it, we would not be here. That's why solar power is one of the most obvious choices for renewable energy.

Solar panels are often placed on top of buildings or on an industrial scale in open fields as a way of capturing the energy from the sun. They contain photovoltaic cells which cause a reaction between the photons and electrons. When the electrons are excited and catapulted loose, they are captured and funnelled into usable energy.

The more sun exposure, the more electricity is produced. The electricity not being used immediately needs to be stored somewhere until it is required, so alongside the

solar panel installations there is a large-scale battery storage unit. These take up more open space and together can prove very controversial.

The use of large scale industrial solar panel installation has many pros and cons and there is a plethora of information available for research purposes.

### **View of Bagnall Parishioners**

To obtain the views of parishioners, the Parish Council published a newsletter, which contained a few facts about solar panel installations and their associated battery storage units. This was hand delivered to every household within the Parish. Out of the 370 newsletters delivered, the Parish Council has received 31 responses. This is made up of one in support and 30 against.

A few responses have been received from nearby parishes, but these have not been included within this report.

Although this small number of responses is disappointing it was expected, but it does give a clear indication that most Parishioners are not in favour of industrial scale solar panel installations and associated battery storage units, although generally have no objection to roof top installations on residential or commercial property.

Within all the responses received, the same comments appear regularly; extracts are shown below, duly edited to ensure anonymity:

*“We are privileged to live in a rural location and it’s imperative that the impact we have on the local environment and wildlife is at the forefront of any decisions, and whilst change is inevitable any new developments should be sympathetic to Bagnall’s historic village.”*

*“I share the concerns raised regarding the pace of change in technology which will likely render any large development outdated, not fit for purpose and a poor return on investment in 5 – 10 years.”*

*“I am very strongly against any development that negatively impacts on our countryside and our wildlife. I would want the Parish Council to robustly challenge these developments.”*

*“I say no to battery and solar panels on green belt good farmland; this land should be farmed. Crops absorb carbon and the removal of grazing livestock would have a catastrophic effect on our landscape as they are an integral part of its creation and management”*

*“I would like to register an objection to potential solar farms and electrical storage farms in the Parish. A large proportion of the Parish is green belt which is one of the reasons we chose to live in the village. I understand that renewable energy is the way forward but there are numerous Brownfield sites, industrial buildings and public buildings within the Staffordshire Moorlands that could be used for renewable energy without impacting on the green belt.”*

*“My answer to the plans is No, for the following reasons:*

- *History of explosion concerning Battery Storage. It has been shown that the Battery Storage Units, are sometimes unstable and could essentially damage, injure or even kill ... within a large radius of their position.*

- *A complete eyesore ... they can be seen from a large distance away by road and tracks used daily by walkers, cyclists, and horse riders.*
- *The damage it would create to the natural beauty and nature of the area, including animals, insects etc.*
- *The well-being of human beings.*
- *The reduction and possible sale price of ... property.”*

*“Whilst I support the move towards green energy, I think that the first steps should be the requirement for commercial buildings, both retrospectively and going forward, should have roof top solar panels, alongside this any new residential property should be required to install roof top solar panels.”*

Parishioners have therefore instructed the Parish Council too robustly challenge any planning applications for solar power / battery storage installations on open land that come before them.

It is acknowledged that the Parish Council is only one voice and the ultimate decision rests with the Planning Department at Staffordshire Moorlands District Council. Parishioners are therefore encouraged to make their views known directly to Staffordshire Moorlands District Council when applications are put forward.

## **Proposal**

The Parish Council is asked to consider if it is willing to accept the instruction of its parishioners.

If so, that the following points become our standard response to solar panel / battery storage applications -

- The use of agricultural land for large ground-mounted solar installations and battery storage units should be avoided in all circumstances. This reflects the growing importance of food security.
- The redevelopment of brownfield and previously developed sites should be encouraged.
- Where brownfield land is suitably located for housing, roof-top solar energy generation should be integrated. Alongside this, planning conditions should require the inclusion of roof-top panels in the specification for new commercial developments.
- Ground-mounted solar energy installations and associated battery storage units should not be permitted in designated protected areas such as Green Belt, Areas of Outstanding Natural Beauty (AONB) and Rural Areas Beyond the Green Belt to preserve the special qualities of these areas.
- All applications relation to proposed large solar installations and battery storage units within this rural setting should be accompanied by a comprehensive landscape impact appraisal, indicating the loss or change in character of landscapes. This includes the impact on views from publicly accessible land, footpaths, and other rights of way.
- All applications should be reviewed by the planning authority, taking into consideration the cumulative impact on landscape character of multiple installations, including any other visible energy infrastructure such as wind turbines.

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Bagnall Parish Council

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