



## BAGNALL PARISH COUNCIL

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### **CONSULTATION ON SOLAR PANELS AND BATTERY STORAGE**

The village of Bagnall is a lovely place to live, but the world is changing. Technologies are advancing at an alarming rate and then there's that phrase on everyone's lips currently – Climate Change. The Parish needs to embrace with open arms those technological advances that benefit our community, and robustly challenge those that do not.

Over the coming months Bagnall Parish Council is aware it will receive planning applications for areas of our countryside to be put to the use of producing or storing electricity, both for our community and for the communities surrounding us, principally by large scale solar panel installations and battery storage facilities. Whilst each individual Parish Councillor has their own views, and I'm sure some consensus could be achieved, Parish Councillors were elected to represent the majority view of this Parish and not their own – though we are sometime accused of promoting our own causes, this is not the case.

Therefore, Parish Councillors are asking you, our Parishioners, to provide us with your views on whether to give our approval to these applications or robustly challenge them. This is your opportunity to give us direction. Just a simple 'yes' or 'no' will suffice.

Every view is important, don't be fooled into thinking "Oh, the development is on the other side of the Parish and doesn't affect me". Once these applications start coming in, they will affect us all at some time and once our decision on the way forward has been made, whether for or against, it will be difficult to change.

As the Responsible Officer/Clerk of the Parish Council I would ask you to email, text or just phone with your views to be received before 31 January 2022. Please don't be offended if I ask for your name and address – I am only collecting those views of our community, not those from outside of the Parish. I can assure you that any information put before the Parish Council will be anonymous – no Parish Councillor will be aware of who has or has not commented nor which way they supported. Sorry, but you'll just have to trust me on that one.

There is a plethora of information available, both for and against the use of solar panels and the associated battery storage facilities and I would urge you to do your own research, but some points to be borne in mind are:

## ***The need for sustainable energy***

The Government is committed to achieving net zero emissions by 2050 which requires a fundamental change in our sources of energy, including the generation of electricity. Certain renewable energy sources, if not properly controlled, can have serious consequences for our natural environment. Whilst Planning Authorities should maximise development of this energy this should not override local environmental protections nor the planning concerns of local communities.

## ***Solar energy options***

There are two main options here –

- Photo-voltaic (PV) panels positioned on rooftops can make a significant contribution towards our electricity supply. These have the added benefit of providing generation at the point of use, thereby reducing transmission and distribution losses and the impact of associated infrastructure. They can be added to existing or proposed large commercial and agricultural buildings, as well as on public, community, and residential buildings. This is an area where most technological research has been focused recently.
- Large scale ground-level installations, or ‘solar farms’ require much more careful consideration. Sites are often surrounded by security fencing, may have CCTV, be floodlit, and have prominent overhead power line infrastructure to connect to the grid and a proliferation of low-level buildings and connections to the grid and battery storage. They can cover huge areas of land, up to 100 hectares (approx. 250 acres) usually in rural locations. Approximately five acres of land is required for every megawatt (MW) of installed capacity. They produce a lot of electromagnetic waves which are very unhealthy to the body which some people are sensitive to and can suffer life-threatening illnesses from. There is a negative impact upon property prices on residencies near solar infrastructures.

## ***Agricultural land***



The Agriculture Act 2020 gives an incentive to farmers to become environmental stewards of their land, planting trees and creating traditional habitats and ecosystems and to focus this agricultural land on the production of food. Energy companies entice farmers with huge financial incentives but should concentrate their development in areas of the country where land is less productive or, better still, concentrate on brownfield sites. The occasional grazing of sheep, chickens or even pigs, is also suggested as a continuing agricultural use, but this is rarely practiced, and is insignificant when compared to the productivity of high-grade arable land.

## ***Landscape and visual impact***



Arguably of equal importance to the loss of high-quality farmland is the potential harm that these developments cause to the landscape. Fields containing continuous rows of metal and glass bring a dramatic industrial scar to an otherwise rural environment which is further damaged

by perimeter security fencing, etc. There is also considerable sun glare from the panels. It is crucial that important landscapes are not compromised, particularly Green Belt, Areas of Outstanding Natural Beauty (AONB) and Rural Area Beyond the Green Belt (RABGB). Traditional views and footpaths are destroyed, and the character of footpaths altered forever, with the most unsuitable sites being on sloping land highly visible from the surrounding landscapes.



## ***Wildlife***

Security fencing surrounding large areas of land removes traditional pathways for transitory animals and bird deaths are common occurrence as large areas of glazing are mistaken for water. Wildlife corridors and nesting and feeding habitats, are destroyed, and once gone such habitats cannot be easily recovered and attempts to relocate these established habitats have disastrous consequences for the species within them. Below the panels, the grass must be kept mown with chemicals used to control weeds and pests, further altering the habitat and nature of local wildlife.

A further concern is the impact on the soil. Large areas of solar panels change the way rainwater falls on the ground and how air moves around them, with large areas put in permanent shade. The earth is our biggest carbon store, and it is unknown what impact these environmental changes will have on its ability to continue to store carbon, even to the point of our early interventions making the earth counter-productive in our battle to reverse climate change.

## ***Manufacture and decommissioning***

Considerable amounts of energy and material such as rare earths are required for the manufacture of photo-voltaic panels and batteries and together with transport costs and impact, play a part in the wider environmental impact of solar energy installations. Alongside this solar panels degrade slightly each year, becoming inherently less efficient having only a 20–30-year lifespan. Similar issues relate to batteries.



Most land is leased by energy companies for 25 to 40 years, and with current research it is extremely likely that more efficient sources of producing electricity will be found making these sites

redundant, and the decommissioning of these sites poses several issues. Applicants rarely provide information on how panels and batteries will be recycled or how

numerous tonnes of toxic waste will be disposed of without becoming a legacy for future generations.

### ***Fire hazard***



A specific concern is the potential fire hazard caused by associated infrastructure facilities for solar energy generation. Battery Energy Storage Systems (BESS) are intrinsic elements of large solar installations and use lithium-ion batteries

that require specialist treatment in the event of fire, which most local fire stations do not have. These fires do not need oxygen, feeding off the electricity supply they are storing, making them difficult to extinguish and generating highly noxious fumes.



### ***Reinstatement***



Whilst energy companies generally accept a reinstatement clause in the lease granted, such a liability so far into the future may be worthless. By the time the panels become obsolete it is likely that the operating company will have ceased to exist leaving any bond worthless and it is uncertain as to whether the landowner will finance and undertake any reinstatement as the cost of de-commissioning and re-cycling will outweigh the value of the land leaving an abandoned and derelict site.