



The countryside charity
Norfolk

CPRE Norfolk Position Statement Onshore wind turbines, solar farms and pylons

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We think that the gold standard for onshore renewable energy done well means community energy - renewable energy projects proposed, designed, and owned by local people. An increase in the amount of energy produced and used locally would help address the capacity limitations experienced by the National Grid and ultimately could reduce significantly the need to transmit large quantities of energy over great distances via pylon routes.

We know that the climate emergency threatens to damage many of our most loved landscapes and ecosystems. Places that are precious to us all, including the Broads, the north Norfolk coast and the wildlife-packed Brecks, could all be changed irreparably as our climate shifts.

We need to act fast to cut our greenhouse gas emissions, and to do that we need more low-carbon renewable energy. We want to see these new renewable energy projects done well, in a way that minimises impacts on landscapes. It is also important that schemes designed to harvest wind and solar energy are only permitted if they are supported by the rural communities most directly affected.

Onshore Wind Turbines

- The environmental objective of developing renewable energy through wind turbines should not come at the expense of the beauty, character and tranquillity of Norfolk's countryside, especially when much larger installations can be built offshore which do not have the same negative landscape impacts (see the separate [position statement for offshore energy and associated onshore works](#)), yet have much greater capacities for power generation.
- Wind turbines are capable of altering the look of a landscape over a very large area of countryside. Modern commercial wind turbines are huge industrial structures - up to and in some instances exceeding 200 metres in height (to blade tip). They dwarf all other landscapes features – even Norwich Cathedral spire only reaches 96 metres and most Norfolk churches have towers that are around 20 metres tall. A mature oak tree has an average height somewhere between 15 and 25 metres. Therefore, wind turbines have the potential to become the dominant feature in a landscape. 'Zones of visual intrusion' maps relating to wind turbines often show an impact over an area delineated by a 20km radius centred on a turbine site.
- Aside from visual intrusion wind turbines can produce a number of other detrimental side effects: noise, shadow flicker and light pollution. The MOD may require tall structures to be lit by navigation lights and these lights have a very negative impact when introduced in to previously dark rural landscapes.
- Wind turbine developments are accompanied by a considerable amount of supporting infrastructure including new access roads, buildings and the need for a grid connection and pylons (see separate [pylons statement](#)). This infrastructure has a significant impact on landscape character.

- In an attempt to minimise the noise problems associated with turbines developers often seek sites in very rural locations. Such areas are becoming increasingly rare in our small densely populated island and should be protected from the kind of disturbance produced by wind turbines.
- There are also concerns about the potential threat that turbines pose to bird and bat populations especially in areas that contain Sites of Special Scientific Interest (SSSI).

What CPRE Norfolk is campaigning for:

- Greater weight for local landscape issues. Renewable energy targets should not be allowed to override concerns about the damage onshore wind turbines can do to the landscape.
- Stronger local landscape policies in Local Plans: It is of course important to protect conservation areas, Sites of Special Scientific Interest and Areas of Outstanding Natural Beauty from the negative impact of wind turbines. But the majority of Norfolk is undesignated landscape and it is here that most people enjoy their countryside as they walk the footpath network or cycle along by-roads. Much of this so called 'ordinary' countryside is very attractive and tranquil and equally deserving of protection from visual domination by tall industrial structures. Local Planning Authorities need to include strong local landscape policies in their local plans.

The way forward must not involve a return to a subsidised system in which developers and land owners make large sums of money from "planting" groups of tall turbines in fields dotted around Norfolk at the expense of the landscape. This approach caused much distress and opposition. It should allow communities to own and operate their own smaller turbines (less than 40 metres in height) – possibly one per village. If practical these turbines would be de-coupled from the national grid with the energy they produce used locally. If de-coupling is not feasible the monetary value of all the energy produced should be made available for use by the community. This method of production could lead to many small turbines, in terms of their aggregated output, contributing a greater amount of renewable energy than could ever be achieved by a return to the old divisive system.

Furthermore, developments in wind harvesting technology are enabling the production of a whole new generation of micro wind harvesting machines. CPRE Norfolk fully supports the employment of these devices which could ultimately make the use of mega 3 blade turbines onshore redundant.

Ultimately the choice on whether wind turbines are acceptable must rest with the local community and CPRE Norfolk asks for the reinstatement in the NPPF of the following wording (originally contained in a footnote): *"a proposed wind energy development involving one or more turbines should not be considered acceptable unless it is in an area identified as suitable for wind energy development in the development plan; and, following consultation, it can be demonstrated that the planning impacts identified by the affected local community have been fully addressed and the proposal has their backing."*

Solar Farms & solar energy

CPRE supports the need for mandatory rooftop solar on suitable new domestic and commercial buildings, and retrofitting where possible but is concerned by a recent increase in applications for large solar farms, which has increased the potential for cumulative negative impacts on the landscape, as well as loss of agricultural food production.

The environmental objective of developing renewable energy through large solar farms should not come at the expense of the beauty, character and tranquillity of Norfolk's countryside.

In particular, large-scale or mega size solar farm proposals put forward under the NSIP planning regime are bound to result in unacceptable harm to the countryside and those who experience it, as well as unwarranted impacts on food production and security. Therefore, CPRE Norfolk will object to these schemes.

Furthermore, we view all proposals for solar farms on Greenfield sites in the countryside as undesirable because the impacts of commercial photovoltaic farms with their associated infrastructure in rural landscapes is difficult to mitigate and CPRE Norfolk has a track record of opposing all such developments.

It is especially important that Grade 1, 2 and 3a farmland, defined as 'the best and most versatile agricultural land (BMV) in the NPPF, is protected. It is a finite resource and should be used for the growing of crops that are needed to provide our country with a reliable supply of affordable, nutritious food.

If, in spite of our opposition to solar farms on Greenfield sites, a scheme is permitted it is essential:

1. That the impacts of the development are fully assessed and where possible addressed.

These assessments should cover impacts on biodiversity, hydrology, archaeology, landscape, possible cumulative effects and the disruption resulting from access and vehicle movements during all stages of construction and development. The assessments should be carried out via an Environmental Impact Assessment (EIA). An EIA is required at the application stage for all proposals exceeding 0.5 hectares.

2. That detailed planning conditions are applied to ensure: provision of appropriate screening, in the form of locally characteristic hedges or tree belts; coating of arrays in a non-reflecting material in order to minimise glare and visual impact; reversible construction techniques to permit restoration of the land after decommissioning (i.e. not concrete foundations); visually unobtrusive security fences which enable wildlife to pass freely; strict controls on lighting; appropriate vegetation management regimes (e.g. grazing); a clearly stipulated decommissioning date and a legal agreement on land restoration measures after decommissioning.

What CPRE Norfolk is campaigning for:

- *Greater weight for local landscape issues.*
Renewable energy targets should not be allowed to override concerns about the damage solar farms can do to the landscape.
- *Stronger local landscape policies in Local Plans.*
It is of course important to protect conservation areas, Sites of Special Scientific Interest and Areas of Outstanding Natural Beauty from the negative impact of solar farms. But the majority of Norfolk is undesignated landscape and it is here that most people enjoy their countryside as they walk the footpath network or cycle along by-roads. Much of this so called 'ordinary' countryside is very attractive and tranquil and equally deserving of protection from visual intrusion by industrial-scale photo-voltaic arrays. Local Planning Authorities need to include strong local landscape policies in their local plans.
- *Assessment of impacts.*
EIA screening is required at the application stage for all proposals exceeding 0.5 hectares (as set out in the EIA regs). Proposals should set out suitable assessments of impacts on biodiversity, hydrology, archaeology, landscape and possible cumulative effects. Transport

assessment should consider access and vehicle movements during all stages of construction and development.

- *A ban on the use of tall tracker solar arrays.*

Increasingly tracker solar panels are being used which can reach 4.5 metres in height. It is almost impossible to mitigate their visual impacts on the landscape and in particular on users of public rights of way. This type of solar panel should not be approved for use in the countryside.

The way forward must be based on the potential to harness technological advances in solar energy production which have minimal impacts on the landscape. It will become possible to “harvest” solar power from all manner of artificial surfaces including road surfaces, warehouse and factory roofs etc and these methodological breakthroughs, together with other new approaches such as producing hydrogen from plastic waste, will ultimately make farmland consuming, landscape destroying commercial photovoltaic solar farms redundant.

CPRE Norfolk wants to see more effort, ingenuity and resources put into these new methods of producing renewable energy and, once again, when and where possible, with maximum input from the local community.

We already know from research carried out by the UCL Energy Institute for CPRE that installing solar panels on existing rooftops and other land such as car parks could provide at least 40-50GW of solar energy in England by 2035 and by 2050, with further investment, that there is potential to generate 117GW of low carbon electricity from roofs and other developed spaces - i.e. well in excess of the government's 2035 national target of 70GW.

The government should insist on rooftop solar for all new domestic and commercial buildings, and retrofitting where possible.

Given the great potential of harvesting solar energy from artificial surfaces proposals for solar farms, which usually have a projected life span of 60 years, should not be permitted. Why industrialise large areas of countryside for decades to come when there are much better alternatives available?

CPRE Norfolk wants to involve as many people as possible in its campaigning against large-scale solar farms proposed under the NSIP regime and has formed an Alliance of Parish and Town Councils, action groups, other organisations and individuals to oppose these schemes. You can join the Alliance by [visiting our campaigns page here](#).

Pylons

The rapid increase of wind farms, particularly offshore, requires the transfer of energy into the National Grid (NG). This is achieved through the use of pylons and the development of sub-stations. In many cases these can be linked into the existing grid at the nearest convenient point, but, because of the surge of power, many of the existing pylons will have to be updated, or even replaced by much larger structures.

NG has found considerable opposition from the public to new lines of pylons, especially where they would cross National Parks or AONBs, along with strong local demands to put power lines underground.

What CPRE Norfolk is campaigning for:

- An urgent review of how energy is moved through East Anglia by the National Grid, with the introduction of offshore grid connections and underground cabling, to take electricity generated by offshore wind farms to London and its environs via the North Sea to the Thames estuary
- Revision of NG guidelines: new evidence on costs and techniques of routing cables underground should be built into revised NG policy. There is no need for the visually intrusive and outdated technology of overground pylon routes, such as that proposed by the Norwich to Tilbury project, when undergrounding and/or offshore cabling can and should be used.
- Undergrounding of cables and sensitive siting of sub-stations in Norfolk, where such transmission routes are necessary: CPRE Norfolk will continue to monitor any new pylon and sub-station proposals through the planning consultation process, and will call for undergrounding of cables coupled with implementation of appropriate routes across least sensitive landscapes, including the use of offshore cabling where appropriate.

See also our [Offshore energy and associated onshore works - Position statement](#)