'The mad rush for solar needs to stop': how Miliband threatens to ruin the rural idyll

Labour's green revolution threatens to harm livelihoods as well as landscapes

Ruby Hinchliffe, MONEY REPORTER6 August 2024 • 12:10pm



Isabell Cross, a resident and campaigner, is concerned for the future of her community CREDIT: Tony Buckingham

"Please don't use us as an experiment," beg villagers on the Cambridgeshire-Suffolk border. Soon, their fields will be home to one of Britain's largest solar and battery storage farms.

Narrow country lanes and fields full of birdsong will soon have to make way for 16-wheel vehicles once the two-year project starts. The sprawling layout stretches 15 miles end-to-end, affecting 16 parishes and towns along its route.

Its size is unprecedented – it will have a capacity of 500 megawatts, compared to the current largest in the UK, which is 72.2 megawatts. The site is one of three to be approved so far by the Government, with the other two in parts of Lincolnshire. Together, the farms will have a 1.35 gigawatt capacity.

Often disparaged as "Nimbys", nearby residents will tell you they are fighting for far more than just their nice country view.

They say livelihoods are at stake, that farmland is being "swallowed up by solar", that buyers are pulling out of house sales, and that large scale battery storage containers pose serious safety risks.

Independent inspectors had advised against granting the application, and all local planning authorities had opposed it, with one council leader calling it "the poorest" major planning application they had ever seen. But despite this, the Government has given the go-ahead. Energy Secretary Ed Miliband signed off on the plans after just four working days in office.



Energy Secretary Ed Miliband has vowed to unleash a solar revolution in Britain's countryside CREDIT: James Glossop/PA

It is understood the solar farm will include more than 100 lithium-ion battery containers, each over six metres high.

Residents say the risks of toxic and explosive gases, should one of the containers overheat and trigger dangerous chemical reactions, have been played down by the developer Sunnica.

Two physicists The Telegraph spoke to, one of whom advises the Ministry of Defence, also stressed the risks of solar farms with battery storage containers. They pointed out that "relatively little" research has been done into battery failure and, while the chances of a large-scale failure are small, the resulting explosions can be severe, with a risk of toxic substances being released into the atmosphere.

There are also still no standards for battery energy storage in the UK, a fact which worries top physicists around the country.

Mr Miliband has insisted that the way to avoid another energy crisis is to get off fossil fuels, promising to triple the amount of solar power in the UK by 2030.

The Government is <u>hoping to relax planning laws</u> to make it easier to build solar farms and wind turbines, by increasing the threshold at which ministers must sign off on developments.

Last October, <u>Prime Minister Keir Starmer declared himself a "Yimby"</u> – "yes in my back yard" – and said "we are going to have to take the tough decisions to bulldoze through these restrictions".

Isabel Cross, a resident and campaigner, said: "When we get called 'Nimbys', it's actually really hurtful. This is not just about a view."

'This mad rush for solar on farmland needs to stop'

The solar and battery farm, built by Sunnica, will cover 2,500 acres of arable land. If you drive through villages around the development, such as Chippenham, you can spot signs with bright red letters that read: "Say No to Sunnica". Local hostility towards the company is palpable.

Richard Rout, Suffolk's deputy council leader, has reviewed hundreds of planning applications. He said Sunnica's "nationally significant infrastructure project" application – known as an "NSIP" – was "the poorest NSIP" he had ever seen.

Sunnica has just three employees, according to Companies House, and is ultimately controlled by two Spanish entities.

Residents in Lincolnshire had also written to Mr Miliband, asking him not to approve the plan. "This mad rush for solar on farmland needs to stop," they say in a letter, seen by The Telegraph.

Much of the development in Suffolk/Cambridgeshire will take out of production agricultural land that is already in short supply. All 2,500 acres of land Sunnica is set to build on can be irrigated, but only 8pc of all farmland in the UK can be.

<u>Planning officers</u> are meant to protect the country's best and most versatile land, by rejecting applications which threaten to shrink Britain's arable footprint. This means agricultural production is a valid reason for rejecting a developer's application on a local level.

Sunnica has persuaded some local farmers to give up their land for the project by offering them £1,000 per acre each year for the next four decades, it is understood. This payment will rise annually alongside the Retail Price Index measure of inflation.

Nick Wright, 53, was one of the local farmers who refused this offer.



Nick Wright, 53, says Mr Miliband is allowing 'the best and most valuable [high quality agricultural] land to be swallowed up by solar' CREDIT: Nick Wright

"If Mr Miliband is prepared to allow this amount of best and most valuable [high quality agricultural] land to be swallowed up by solar, then the agricultural production argument goes out of the window. It's all irrigated, vegetable land. Planning is all about precedent. How is the Government going to stop anything else like this in the future?"

Battery safety

In the UK, various trade bodies have put out guidelines for developers on battery energy storage – but there are currently no standards enshrined in law.

In April, the House of Commons published a research briefing, saying that "no laws that specifically govern the fire safety of battery energy storage systems", and that there are "no statutory provisions" requiring developers to adhere to a set of industry standards.

Experts worry this lack of a proper framework could lead to poorer developments being stamped with Mr Miliband's seal of approval.

Some of the most serious major incidents involving lithium-ion batteries around the world have propelled firefighters into the air, spat out 20-foot fireballs, and in Beijing two people died in 2021 after 47 fire trucks were called out. In Liverpool, an incident in 2020 took 56 hours to control.

There are 81 lithium-ion battery storage sites around the world today, the majority of which are in South Korea.

Paul Christensen, a professor of electrochemistry at the University of Newcastle, is on the Government's Energy Storage Health and Safety Governance Group, and also advises the Ministry of Defence.

He said the failure rate of lithium-ion batteries is "small" in real terms because usually only one container out of hundreds on a site goes down. Since 2011, 89 failures have been recorded worldwide on individual sites, according to the Electric Power Research Institute.

However, Mr Christensen said, it is "critically important that developers, fire services and planning officers understand the risks".

He added: "The problem is we have no standards in this country, and this vacuum is causing difficulties. America and Australia are streaks ahead of us on regulation of lithium-ion batteries.

"I have seen some pretty awful planning applications in my time...You've got some developers that don't know anything about these batteries...And planning officers know very little about the risks and hazards. There are still fire departments that don't understand them too."

Toxic oxides

A House of Commons briefing published earlier this year acknowledged that gases produced from battery fires "are toxic, which can pose a risk to site workers and emergency responders if inhaled", and that "toxic metals and chemicals can leach into the water used to fight the fire which could then end up in water systems, posing a risk to wildlife".

Edmund Fordham is an energy consultant who advised Schlumberger – the world's biggest oilfield services company – for 33 years.



Edmund Fordham, a physicist, says highly corrosive oxides can be released from incidents involving lithium-ion batteries CREDIT: Tony Buckingham

The physicist, who lives in Cambridgeshire, said: "Highly corrosive, toxic oxides can be released from incidents involving lithium-ion batteries. They can cause water to build up in the lungs, they can dissolve rocks, some are highly carcinogenic and if they get into any water then this needs to be disposed of safely."

Mr Fordham added: "These substances can be carried a few hundred metres in the air, and protected wetlands round here could be at risk if they disperse into any natural water. There's a witch's brew of toxic stuff that can come off one of these battery 'fires'."

The Government has insisted lithium-ion battery "fires" at solar farms "are extremely rare". Technically, the batteries only ever overheat, and the fire comes from subsequent chemical reactions.

The Government also claims there are already "strong regulations" in place requiring manufacturers to make products safe throughout their lifespan, and that the UK's Health and Safety Executive "robustly regulate battery storage".

But experts such as Mr Christensen dispute this, and say early engagement with Fire Service Resources is only "recommended" – when it should be mandated.

'The dream of living on protected countryside is under massive threat'

Catherine Judkins, 49, has spearheaded the fight on behalf of residents against the solar farm for over five years. She says the local economy – which is largely made up of horse racing and farming – is at risk.

"One resident got planning permission here to build his forever home, and to build his stud business around it. But since this dropped on his doorstep, he's put a stop on building his house and goodness knows what's going to happen to his business.

"He will be surrounded by solar panels. He's dealing with sensitive racehorses and babies vulnerable to any noises, jolts, inverter noises. He'll be around 100 metres from one of the biggest battery storage areas. They've got known risks and hazards. Investors aren't going to want to put their valuable horses with him in the shadow of a battery storage facility.

"If you undermine these industries, people will fear for their livelihoods. Landscapes aren't just views, they're people's homes and businesses."



Catherine Judkins, 49, believes the local economy – which is largely made up of horse racing and farming – is at risk CREDIT: Tony Buckingham

She added: "People aren't anti-renewables here. We already have solar panels in the area on a smaller scale. But these solar fields will be the same size as the villages."

Ms Cross said one man in his eighties has tried to sell his home three times, and that each time the buyer has pulled out once they discover the solar farm plans. "It's consequences like this that don't seem to have been thought through," she said.

Craig Fuller, a south Gloucestershire-based estate agent, is currently fighting alongside residents in north Wiltshire who are trying to stop a 500 megawatt solar farm called Lime Down being built. It is vet to receive planning permission.

Mr Fuller said: "The industrial solar complexes such as Lime Down – covering over 2,200 acres of agricultural and stunning landscape – will have a dramatic effect on house prices. Not only directly for those in amongst the sprawling complex, but also much further afield."

Studies indicate around a 4pc to 6pc negative effect on house prices, but are based on much smaller solar farms. However, the agent suggests that those homes nearest the farms could experience drops as dramatic as 30pc. He has already seen a handful of properties, worth £750,000 to £12m, having to be repriced.

He added: "Given the present 'steam-roller' approach of the new Government, I think that the dream of living on protected countryside is under massive threat. The benefit is to landowners, who tend to have inherited the land with their main house miles away from the proposed development."

'I dread to think what the next five years will look like'

Because the development is a "Nationally Significant Infrastructure Project", the Government could overrule local decisions and push it through to help it meet national net zero targets.

MPs have criticised this system. In Westminster last year, Conservative MP Dr Caroline Johnson – who represents Sleaford and North Hykeham in Lincolnshire – warned that the overdevelopment of solar farms will negatively impact house prices.

Nathan Beckett, 36, manages the community centre in Isleham. He feels that the signing off by the secretary of state was nothing to do with the project, and that rather it was "just a tick-box exercise".



Nathan Beckett, 36, says when he first saw Mr Miliband's decision, he thought it was a joke CREDIT: Tony Buckingham

He added: "We want a green world. We have solar panels and batteries here [at the community centre], but they are minute in comparison to the size of what is being built.

"When we first saw the decision we thought it was a hoax, a wind-up. With Labour coming in, I'd assumed it would be months until someone could have had a proper look at it.

"Our local MP really quizzed Ed Miliband and he laughed it off as a joke. It's insulting, and a low-level understanding of the risks involved. If this was just the first week, I dread to think what the next five years will look like."

A spokesman for the Department for Energy Security and Net Zero said: "Solar power is crucial to achieving net zero, providing an abundant source of cleaner, cheaper energy.

"We will make tough decisions with ambition, urgency and the highest safety standards, to make the UK a clean energy superpower."

A spokesman for Sunnica said its 'Battery Fire Safety Management Plan' "is to be approved by the relevant planning authorities" and is in consultation with the fire and rescue services.

They said this included a "comprehensive review of the life safety and property protection fire safety requirements" of the sites, and that the scheme "does not give rise to a significant fire risk".