The countryside charity

July 2025

Getting solar off the ground

The problem of mega solar in the countryside

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1. Introduction

Climate change is the biggest threat to our countryside. Failure to decarbonise is not an option, and time is running out. As previous work by CPRE has demonstrated[1], 60% of our best and most versatile farmland is at risk of flooding due to climate change.

There are choices, however, about how we decarbonise. To date, the deployment of solar energy, particularly larger, so called mega solar, has been problematic in our countryside. Despite planning policy encouraging the protection of our productive farmland, our analysis shows that of the land used by England's largest operational solar developments, nearly two-thirds (59%) is assessed as most productive (BMV Grades 1-3b) and one third as best and most versatile (BMV Grades 1-3a).

As CPRE's 'Shout from the rooftops' report[2] demonstrates, this is unnecessary when so much space on homes, brownfield sites and warehouses remain unused, which could generate needed clean power, enough for 117GW. We are calling for at least 60% of all installed solar to be on roofs by 2035 – matching the ambition of many other countries who are successfully minimising the impact of solar energy generation on our finite supply of land.

The geographic spread of solar energy generation on farmland is uneven, dependent more on the ease of connection to the grid and the profit margin for developers, than a location determined strategically by holistic energy planning or that makes sense to communities. In some areas, our countryside is being eroded at an accelerating rate, causing adverse landscape impact, particularly if concentrated or clustered, causing cumulative and 'in combination effects'. Too many people in these communities feel unheard and their voices marginalised.

We welcome moves from the government to boost rooftop solar, including in the Solar Roadmap, to mandate solar on most new homes and increase it on schools, hospitals and car parks, to make it easier for commercial warehousing to benefit from rooftop solar, to boost community energy, and to coordinate energy infrastructure investment via a Strategic Spatial Energy Plan. Linked to a Land Use Framework, a more strategic approach to land use with targeted actions could help identify the right solutions for solar energy and maximise rooftop solar.

There remains a significant gap however in the government's approach. A target scenario in the Solar Roadmap[3] sets out that as much as 60-65% of solar energy could be generated from large-scale developments on the ground, which would have profound consequences for rural England. Without tougher restrictions on the deployment of solar on our best farmland and more regard for landscape impacts of large solar schemes, our countryside faces considerable, and needless harm.

CPRE has compiled this evidence to demonstrate that too many solar panels are focused on productive farmland, why this is problematic, and how the government should avoid any further loss of quality farmland for mega solar by offering smarter solutions.

CPRE calls on the government to support a more countryside-friendly approach to clean power.

1. Be much more ambitious on the rooftop revolution and set a target for at least 60% of solar energy to come from rooftop solar, car parks and brownfield land.
2. Ensure a more strategic use of land through a Land Use Framework and the Strategic Spatial Energy Plan, avoiding irreversible loss of habitat, such as peatland, and protecting our best and most versatile soils.
3. Ban ground mounted solar on our very best agricultural land, especially Grades 1 and 2 due to its scarcity.
4. Require all new buildings (including commercial) to install solar during construction as standard, extending the commitment in the upcoming Future Homes Standard mandating solar on new homes to non-domestic property.
5. Support a scale up of retrofitting of rooftop solar installations, prioritising large buildings like farm barns and warehouses.
6. Encourage more community energy projects to achieve more local generation and higher energy efficiency.
7. Upgrade the national high-voltage and regional-distribution grids with a joined-up approach via the Strategic Spatial Energy Plan to unlock much more rooftop solar. This should focus on existing urban areas, and areas identified for growth in strategic and local plans.
8. Ban ground mounted solar in designated landscapes of National Parks and National Landscapes. Outside these areas, landscape sensitivity studies should help protect landscape character, beauty and tranquillity.
9. Ensure woodland, trees, ponds, and hedgerows on all energy development sites are retained to support nature restoration in accordance with the principles of the Environment Act 2021.
10. Increase the quality of community engagement on renewable energy and grid infrastructure projects, by ensuring good practice is applied more consistently.[4]

2. Infinite ambitions on finite land

Demands on our finite supply of land are increasing, yet decision making about land use fails to treat land as a finite resource.

A Royal Society Report on multifunctional land use from 2023[5] estimated that by 2030, up to 1.4 mega hectares (MHa) of additional land (equivalent to the area of Northern Ireland) could be needed to meet current policy targets for net zero and biodiversity, if current agricultural production, diets and food waste remain static. This rises to 4.4 MHa by 2050 – over twice the land area of Wales and 18% of total UK land area.

Alongside the ambition to be net zero by 2050, with most energy generation from renewable energy (77-82%) by 2030[6], other government targets include:

- By 2027, three quarters of our rivers, streams and lakes in good health.
- By 2029, 1.5 million new homes and additional new towns programme.

- By 2030, 30% of biodiversity protected through the Environmental Act 2021, which requires 10% Biodiversity Net Gain, through the establishment of a Nature Restoration Fund to deliver nature's recovery steered by Local Nature Recovery Strategies.
- Levels of around 75% overall self-sufficiency in food production to be maintained[7].

CPRE supports these ambitions and the government's stated intention to produce a strategic land use framework[8] to support more joined up decision making about land use, including relating to food, nature and energy system planning.

Box 1: Targets for solar power

In the future, our energy system will remove reliance on fossil fuels, which cause harm from the release of greenhouse gases. The government's electricity systems operator has advised on the projected energy capacity for each key energy type in gigawatts (GW)9, as shown in in Table 1.

Current capacity targets (or 'pathways') for solar energy are between 45–47 gigawatts (GW), in addition to the installed capacity of 16.6 GW (as of Q2 2024). This represents a threefold increase in solar capacity relative to today.

Table 1 includes a comparison with the previous government's Powering Up Britain 2023 report10, which aimed for a fivefold increase in solar by 2035, up to 70GW.

Table 1: Comparison of projected energy type capacities in gigawatts (GW) of the current and previous governments.

Energy Type*	Current installed	Current targets: Clean Power Action Plan	Previous targets: Powering Up Britain
Variable			
Offshore wind	14.8	43–50	50
Onshore wind	14.2	27–29	Not Specified
Solar	16.6	45–47	70
Firm			
Nuclear	5.9	3-4	24
Dispatchable			
Low Carbon Dispatchable	4.3	4.3-6.5	Not specified
Unabated gas	35.6	35	Not specified
Flexible			
Long-duration energy storage	2.9	4–8	Not specified
Battery storage	4.5	23–27	Not specified
Interconnectors	9.8	12.5	Not specified
Consumer-led flexibility	2.5	10-12	Not specified

*Variable sources change due to the amount of the wind and sun hours, firm sources are constant irrespective of the weather, dispatchable are sources that can be turned on and off, such as hydro and gas-powered electricity, and flexible relate to batteries, and other sources, including consumer own behaviour.

3. What's the problem with solar on our best soils?

Some solar will need to be installed on the ground to ensure the necessary pace of decarbonisation. We have choices for how much and where it goes.

According to the Shout from the Rooftops report[11] meeting national solar energy targets through ground-mounted schemes alone could require between 0.9-1.4% of the land in England, covering as much as 1,800 square kilometres/ 180,000 hectares of our countryside – an area larger than the size of Greater London (157,000ha).

CPRE has previously called for ground mounted to be no more than 40% of installed solar with the 60% majority of solar energy capacity coming from rooftop solar. The government's Solar Roadmap indicates that under their current policy scenario, "of the capacity installed by 2030, around 60%-65% could be large-scale projects, around 20% domestic rooftop and around 15%-20% commercial rooftop and ground mount". CPRE believes that there should be more focus on accelerating solutions to remove barriers to rooftop solar to stop the loss of our best and most versatile agricultural land and the resulting key problems key set out below.

1. Loss of productive land

   A secure food supply and targets for self-sufficiency in food production could be threatened into the future when prime soils are covered by solar panels. Although temporary, consents are often for 40 years, even 60 years, as much as three generations of farmers.

   Food production is displaced, and this has an impact on the amount of land left for nature, often resulting in opposition from farming communities and conservation groups.

2. Loss of landscape value

   England's iconic rural character is being needlessly eroded due to the industrialisation effect of large solar schemes, particularly where there is a cumulative impact of multiple schemes in particular areas.

   Landscapes that are protected by designations for their landscape status, such as National Parks and National Landscapes (formerly called Areas of Outstanding Natural Beauty or AONBs) should be avoided entirely for ground mounted schemes.

   CPRE encourages a robust assessment of landscape impacts outside national designations to ensure the location of development is well considered, following the guidance of the Landscape Institute[12].

   This will inevitably mean restricting development in some circumstances, such as in locations that are particularly prominent or tranquil due to the scale of development and associated scale of harm arising.

3. Cumulative impact

   In addition to the rise in speculative applications for mega solar, the cumulative impact of multiple applications in the same landscape often clustered around grid connections, multiplies the visual, environmental and community impacts.

   For example, a cluster of mega solar farm applications has arisen on high-quality farmland in eastern England. Despite the Solar Roadmap estimating only 0.4% of UK land, some parliamentary constituencies already have considerably more, such as Sleaford and North Hykeham, which has more than 7%[13] and this is likely to become more widespread with higher proportions of constituency land area covered by solar farms.

4. Biodiversity at risk

   Despite claims of biodiversity enhancement and sheep grazing under panels, the reality of most large solar schemes is very different. Most large, security-fenced solar schemes disrupt wildlife habitats and connectivity – including through increased light pollution. Although there are best practice examples that secure biodiversity gains and combine farming, they are not commonplace. At a time when we already face an uphill journey to meeting nature restoration targets, irreplaceable habitat should not be developed and CPRE wants to see a precautionary approach even for uses like ground-mounted solar. All hedges and established vegetation, including mature trees, should be retained and protected during construction of solar developments.

5. Loss of public support for net zero

   Poorly sited solar is jeopardising the success of the Clean Power Mission. Mega solar has serious landscape impacts and understandably, people are concerned about the way solar is being deployed at scale, and too often feel that their voice is ignored.

Protections in planning policy

The National Planning Policy Framework has provisions to value the benefits of best and most versatile agricultural land: *"Planning policies and decisions should contribute to and enhance the natural and local environment by: … b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland".*[14]

In addition, the National Policy Statement (NPS) for energy infrastructure also have policy protections for best and most versatile land (Grades 1, 2, and 3a of ALC).

The Solar Roadmap[15] sets out on page 20 that it will maintain planning protections for our best agricultural land. Given our analysis here, we believe these need to be strengthened to have the intended effect.

Box 2: How are 'best soils' defined?

Farmland in the UK is graded according to its quality in a system called the Agricultural Land Classification (ALC) system. It takes into account soil quality and the nature of the site to determine how well the land can support different types of crops and how reliable their yields might be. ALC grades are defined as follows:

Grade 1: Excellent quality agricultural land — land with no (or very minor) limitations and with high and less variable yields. A very wide range of agricultural crops can be grown, such as apples and pears, salad crops, soft fruit, and winter harvested vegetables.

Grade 2: Very good quality agricultural land — land with minor limitations that affect crop yields, cultivations or harvesting. Generally high yielding land but may be lower or more variable than Grade 1.

Grade 3a: Good quality agricultural land — land which can consistently produce moderate to high yields of a reduced variety of arable crops, such as cereals, sugar beet and potatoes.

Grade 3b: Moderate quality agricultural land — capable of producing moderate yields.

Grade 4: Poor quality agricultural land — land with severe limitations.

Grade 5: Very poor quality agricultural land — land with very severe limitations.

A 2025 CPRE report[16] shows that the data used in the ALC is out of date, with much of it from the 1940s, and calls for the ALC to be updated to aid future decision making. This is relevant for energy system planning because current policy distinguishes between Grades 3a and 3b land with stronger guidance for energy developers relating to avoidance of development on 3a than on 3b. CPRE believes that we should avoid solar developments on all moderately or highly productive farmland and should instead select areas of poor and very poor agricultural land, alongside a much greater focus on rooftop solar.

Natural England[17] sets out how much agricultural land in each grade exists. It reports that the rate of loss of BMV land has accelerated by three times in recent years.

Table 1. Distribution of Provisional ALC grades across England (Natural England)[18]

ALC Grade	Area (ha)	% of total
Grade 1	354,585	3
Grade 2	1,849,074	14
Grade 3	6,290,210	48
Grade 4	1,840,050	14
Grade 5	1,100,734	8
Non agricultural	656,189	5
Urban	951,513	7
Exclusion	1,646	0.01
Total	13,044,001	100

4. The extent of solar on our most productive farmland

According to the Renewable Energy Planning Database[19], dated 26 June, there were 456 solar developments of more than 30MW proposed or operational in the UK, with 425 of those in England. 38 of the number are currently operational, covering some 2,668 hectares, as shown in Appendix One. In Appendix Two we set out details for those over 50MW.

Operational large scale solar developments (more than 30MW)

Despite national policy aiming to protect best and most versatile land, our analysis found:

- More than half of the operational sites over 30MW, equal to 53%, or 20 of the 38 sites, included BMV land (Grades 1-3a).
- Combined the sites had 827 hectares of BMV land, equal to 31% per cent covered by solar development. Breaking this down by quality, it was found that 45.0 hectares was Grade 1, 215.9 hectares was Grade 2, and 565.5 hectares of was Grade 3a.

The planning application documentation shows 27 of the 38 operational sites were located on green fields, previously in agricultural use, and nine were brownfield sites, previously used as airfields, by the Ministry of Defence land, or for landfill.

Three of the green field large-scale, operational solar sites, Sutton Bridge in South Holland in Lincolnshire, Goosehall in East Cambridgeshire, and Black Peak Farm in South Cambridgeshire are entirely made up of best and most versatile land. Three further large solar developments have more than 90% of the site classed as BMV land.

The large solar development at Ermine Street Farm in North Kesteven, although brownfield, also has the majority of the site, 63%, classed as best and most versatile Grades 2 and 3a, due to the existence of fine loam soils.

The reality of where large scale and mega operational solar developments are located, suggests that the national policy aiming to protect and minimise use of best and most versatile land (Grades 1 to 3a) is not working effectively.

In addition, a further 755 hectares of the land across all 38 sites was assessed as Grade 3b, equal to 28% of the total land, which is still productive farmland, albeit deemed of moderate quality. Grade 3b agricultural land is nevertheless capable of producing moderate yields, often with value to agricultural businesses as pasture for rearing livestock. It also has nature, landscape and other environmental benefits.

Taken together, the 31% of BMV land used and the 28% of Grade 3b 'moderately productive' land used means that nearly two thirds (59%) of all the land used currently used for large scale solar development is productive farmland.

Large solar development in the pipeline

In addition to operational large solar development over 30MW there are a further 219 applications solar developments approved and are currently awaiting, or are under, construction. Given the planning context for solar developments has changed little from the

time when operational sites were consented, we can expect a similar pattern of permission to be granted going forward. This means that we might expect something like half of new developments to also include BMV land. This could amount to thousands of hectares of our best farmland going under solar farms.

We must rapidly expand solar as part of the mix to reach clean energy goals but there are political choices that could tip the balance towards more of it going on rooftops. That would mean fewer hectares of farmland going out of production and particularly only lower quality land being covered and less visual impact on rural landscapes. Why not save our best and most versatile soils (Grade 1-3a), and most productive farmland (Grade 3b), when a clear alternative exists?

Box 3: Supporting farmers

Farmers have experienced serious economic challenges in the past decade for various reasons.[20] As such CPRE recognises why solar development might appear an attractive economic proposition on farms, to help balance the books of agricultural businesses. They certainly can help reduce the carbon footprint and reduce energy bills. However, in the first instance, CPRE strongly recommends that farm building roofspace is the focus of installed solar PV. In all cases, land value in terms of landscape, nature and other environmental factors should be fully recognised when future land uses are decided.

CPRE echoes the Tenant Farmers Association[21] seeking protections for tenanted farmers. Despite Keir Starmer, Prime Minister, saying 'we've got to give them a fair deal, and we've got to use our land well', this did not stop a recent Secretary of State approval for a solar development, which involved the loss of half of the land tenanted by a third-generation farming family in Malton, North Yorkshire.

5. The untapped potential for rooftop solar

CPRE believes that damaging and divisive mega solar applications on farmland are unnecessary if the potential for solar on rooftops, car parks and brownfield sites is realised.

In a 2023 interview following a speech on green investment, Ed Miliband, as Shadow Climate Secretary, expressed strong support for expanding rooftop solar in the UK: "On the solar rooftop revolution, that's something we're very interested in... I think it's a huge opportunity on commercial premises, and a huge opportunity in the home as well".[22] CPRE welcomed the announcement on the 6 June 2025 by Miliband, now the Secretary of State[23], that the new Future Homes Standard would require most new homes to have solar PV installed. However, CPRE believes there is much more untapped potential for rooftop solar.

CPRE's Shout from the Rooftop report[24] is based on independent research[25] of University College London, which shows that solar installed on rooftops, car parks and brownfield could deliver 40–50 GW by 2035, which is over half of the government's 2050 target, and up to 117 GW by 2050 with further investment.

6. Recommendations

With government plans to triple the amount of solar development, the findings of this report showing nearly two-thirds of the land used by operational large scale solar is productive farmland - 31% of which is best and most versatile – are cause for concern. More action is needed to protect productive farmland and rural landscapes from the largest 'mega' solar developments.

CPRE calls on the government to support a more countryside-friendly approach to clean power.

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2. Ensure a more strategic use of land through a Land Use Framework and the Strategic Spatial Energy Plan, avoiding irreversible loss of habitat, such as peatland, and protecting our best and most versatile soils.
3. Ban ground mounted solar on our very best agricultural land, especially grades 1 and 2 due to its scarcity.
4. Require all new buildings (including commercial) to install solar during construction as standard, extending the commitment in the upcoming Future Homes Standard mandating solar on new homes to non-domestic property.
5. Support a scale up of retrofitting of rooftop solar installations, prioritising large buildings like farm barns and warehouses.
6. Encourage more community energy projects to achieve more local generation and higher energy efficiency.
7. Upgrade the national high-voltage and regional-distribution grids with a joined-up approach via the Strategic Spatial Energy Plan to unlock much more rooftop solar. This should focus on existing urban areas, and areas identified for growth in strategic and local plans.
8. Ban ground mounted solar in designated landscapes of National Parks and National Landscapes. Outside these areas, landscape sensitivity studies should help protect landscape character, beauty and tranquillity.
9. Ensure woodland, trees, ponds, and hedgerows on all energy development sites are retained to support nature restoration in accordance with the principles of the Environment Act 2021.
10. Increase the quality of community engagement on renewable energy and grid infrastructure projects, by ensuring good practice is applied more consistently.[26]

7. Appendix One: Operational large scale solar (more than 30MW)

Table 1: Operational solar developments of more than 30 MW of installed solar PV located on brownfield

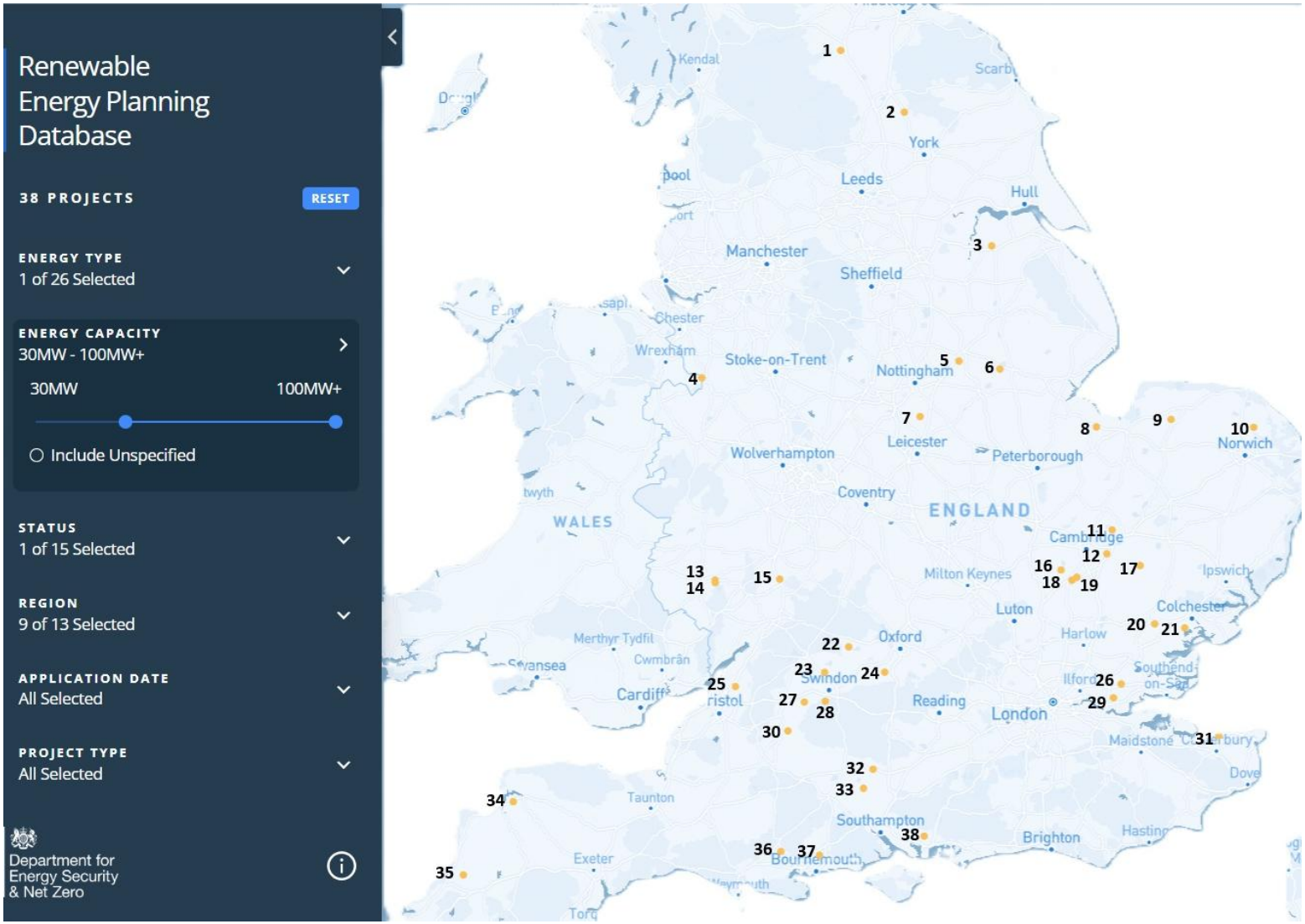
Map ref	Site Name	Planning Authority	Application Ref	Yrs	Installed Capacity (MW)	Site size hectares	BMV 1 hectares	BMV 2 hectares	BMV3a hectares	Total (1-3a)	BMV %	ALC 3b hectares
6	Ermine Street Farm	North Kesteven	13/0929/FUL	35	32.5	67.5	0	17.5	25	42.5	63.0	25
7	Wymeswold Airfield	Charnwood	P/12/1781/2	25	34	75.5	0	0	0	0	0.0	0
9	West Raynham	North Norfolk	PF/13/1166	30	49.9	91.1	0	0	0	0	0.0	0
10	Scottow Moor (Phase 1)	North Norfolk	PF/14/1334	25	50	97.9	0	0	0	0	0.0	0
17	Broxted (Stradishall Airfield)	West Suffolk	SE/12/1114/FUL	25	35	65.8	0	0	0	0	0.0	0
22	Kencot Hill Solar Farm	West Oxfordshire	12/0584/P/FP	20	37	51.4	0	0	0	0	0.0	0
27	Bradenstoke solar park	Wiltshire	14/06989/FUL	30	69.8	90	0	0	0	0	0.0	0
28	Wroughton Airfield	Swindon	S/13/0809	30	41	67	0	0	0	0	0.0	0
29	Ockendon Landfill	Thurrock	14/00836/FUL	25	38	98.4	0	0	0	0	0.0	88
					387.2	**704.6**	**0**	**17.5**	**25**	**42.5**	**6.0**	**113**

Table 2: Operational solar developments of more than 30 MW of installed solar PV located on greenfield sites (former farms, wildlife habitat)

Map	Site Name	Planning Authority	Application Ref	Yrs	Capacity (MW)	Site (ha)	BMV 1	BMV 2	BMV 3a	BMV	%	ALC 3b
1	Darlington Road, Skeeby	North Yorkshire	21/00931/FUL	40	55	69.5	0	0	27.8	27.8	40.0	41.7
2	York Solar	North Yorkshire	15/01268/FUL	30	34.7	74	0	0	69.6	69.6	94.1	2.2
3	Raventhorpe Farm	North Lincolnshire	PA/2014/0892	30	38	69.8	0	0	12.6	12.6	18.1	42.6
4	Bubney Farm	Shropshire	21/01661/FUL	40	40	65.1	0	0	47	47	72.2	19
5	The Grange	Newark and Sherwood	19/01408/FULM	40	49.9	69	0	0	12	12	17.4	57
8	Sutton Bridge Solar	South Holland	H18-1126-20	40	49.9	118.3	39.4	78.9	0	118.3	100.0	0

11	Goosehall	East Cambridgeshire	15/00723/ESF	35	39.5	72.4	0	60.1	12.3	72.4	100.0	0
12	Great Wilbraham	South Cambridgeshire	S/2763/13/FL	30	38.1	63.1	0	0	30	30	47.5	33.1
13	Larport	Herefordshire	P213963/F	35	45	83.1	6	16	54	76	91.5	5
14	Larport, Clay Hill Pit	Herefordshire	P212457/EIA	35	20	0.8	0	0	0	0	0.0	0
15	Glebe Farm	Wychavon	15/01323	25	32	39.1	0	0	10	10	25.6	10
16	Vine Farm Solar Park	South Cambridgeshire	S/1067/14/FL	25	45	88	0	20	40	60	68.2	40
18	Munceys Farm	South Cambridgeshire	S/1898/14/FL	35	31.6	48.6	0	3.2	43.1	46.3	95.3	3.6
19	Black Peak Farm	South Cambridgeshire	S/1902/14/FL	35	31.8	55.8	0	16.2	39.6	55.8	100.0	0
20	Periwinkle Hall	Baintree	21/01878/FUL	40	35	50.5	0	0	7.9	7.9	15.6	40.1
21	Layer Farm	Colchester	202695	40	49.9	96.8	0	0	22.2	22.2	22.9	73.6
23	Water Eaton Farm	Wiltshire	14/04326/FUL	25	30	47.2	0	0	0	0	0.0	47.2
24	Landmead Farm	Vale of White Horse	P13/V1664/FUL	40	41	78.6	0	0	39.3	39.3	50.0	39.3
25	Larks Green Solar Farm	South Gloucestershire	P20/13909/F	35	49.9	106	0	0	0	0	0.0	0
26	Crouch Solar Farm	Brentwood	21/00834/FUL	40	49.9	38	0	0	0	0	0.0	38
30	Snarlton Farm (Melksham)	Wiltshire	13/06140/FUL	25	49.6	80.5	0	0	0	0	0.0	0
31	Owls Hatch Road	Canterbury	CA//14/01792	25	48	86	0	0	0	0	0.0	0
32	Cowdown Lane	Test Valley	14/00949/FULLN	25	40	63	0	4	27.5	31.5	50.0	32
33	Eveley Farm	Test Valley	15/00094/FULLS	25	49	77.6	0	0	17.6	17.6	22.7	60
34	Litchardon Cross Solar Farm	North Devon	71708	35	49.9	36.6	0	0	0	0	0.0	18
35	Canworthy Water	Cornwall	PA12/07626	25	25	56.1	0	0	0	0	0.0	28
36	South Farm Solar Park	Dorset	2/2019/0850/PAEIA	35	40	71.5	0	0	28	28	39.2	12
37	Chapel Lane Parley Phase 2	Bournemouth, C&P	8/13/0332	25	36	76.7	0	0	0	0	0.0	0
38	Southwick Estate	Winchester	13/02304/FUL	25	48	82	0	0	0	0	0.0	0
					1,192	**1,964**	**45.4**	**198.4**	**540.5**	**784.3**	**31.0**	**642.4**

Figure 1. Map of operational solar developments of more than 30MW (Renewable Energy Planning Database)



8. Appendix Two: Status of mega solar applications over 50MW in England

Below is a breakdown of the twenty-two solar developments recorded on the Renewable Energy Planning Database

Operational

Three solar developments over 50MW are operational in England, including:

1. Darlington Road, Skeeby, with an installed capacity of 55MW approved by North Yorkshire Council 21/00931/FUL was constructed and has been operational since October 2024. (REPD ID8131). The developer makes the claim in the Planning Statement that as only 40% of the site is Grade 3a soil, equal to 25 hectares, it does conform to planning practice on Renewables and Low Carbon Energy. Natural England considered the use temporary, and unlikely to lead to permanent loss, but it did recommend an appropriate soil management plan, and it raised that planning practice guidance encourages siting of large-scale solar farms on previously developed land.
2. Bradenstoke solar park, near Wootton Bassett progressed by MOD Lyneham, with an installed capacity of 69.8MW was approved by Wiltshire planning authority. The application 14/06989/FUL was submitted in July 2014, and the site has been operational since September 2016 (REDP ID2203). It consists of 90 hectares, 83 hectares of which is covered by solar arrays, with a 30 year operational lifespan. As it was a former MOD site, the site is not considered as agricultural use.
3. Larks Green Solar Farm for 70MW was approved by South Gloucestershire Council, P20/13909/F submitted in August 2020 and operational since May 2023 (REPD ID8051). The developer commissioned ALC Report and assessed all 102 hectares as Grade 4, citing soil wetness as the key reason for the poor condition.

Under construction

Two large scale solar developments are under construction.

1. An application for Cleve Hill Solar Project, for 373MW, application reference EN010085 was submitted in November 2018 and approved by the Planning Inspectorate. The site is under construction, with a start date of April 2023, and a completion date of April 2025 (REPD ID6502 last updated July 2024). The Recommendation Report sets out that this is a large site of 370 hectares, however due to the marshy conditions only 2ha is assessed as Grade 2, and 9ha as Grade 3a. As 97% of the loss was of ALC 3b, of relatively low value, the loss of BMV was not a ground for refusal, despite criticism of the robustness of the evidence during the planning hearing (see paragraph 8.2.22).
2. An application 20/2131/FUL for Cowley Complex, at land North Of Hell Hole Lane Thorpe Thewles TS21 3JN, for 120 a MW solar farm on a 38.5 hectare site, was decided by Stockton-on-Tees Borough Council, and is now under construction with a

completion date of July 2025 (REPD ID16393). The duration of the operations is 40 years.

Awaiting Construction

There are six solar developments of more than 50MW capacity awaiting construction.

1. Little Crow Solar Park to the south east of Scunthorpe, of 150MW capacity, was decided by the Planning Inspectorate EN010101 application submitted in December 2020. The development had a start date of April 2025 and a completion date of April 2027. The site is 226 hectares of agricultural farmland predominantly of ALC 3a (16.3% is equal to 36.6 ha) and 3b (77.2% equal to 173.5ha), a case was made that because 89% of land in North Lincolnshire is in agricultural use (with 54% Grade 1 and Grade 2, compared to the national average of 16% of Grade 1 and Grade 2), this made a justification for approval. CPRE challenges this logic.
2. Cottam Solar Project, of 600MW capacity, was decided by the Secretary of State on 5 September 2025, based on the recommendation of the Planning Inspectorate EN010133 application submitted in January 2023, with a start date of January 2024. The site is a mega 1,150 hectares, and the Agricultural assessment in Environmental Statement Chapter 19, found the majority of the site to be Grade 3b, equal to 1,118.3 hectares or 94.8% of the site. There was 6.1 hectares of Grade 2 (0.5% of the site), and 42 hectares of Grade 3a (3.6% of the site).
3. Gate Burton - Solar & Energy Storage Park with a capacity of 531MW, was decided by the Secretary of State on 22 July 2024, based on the Planning Inspectorate recommendation of 4 April 2024 to make a DCO order for application EN010131 submitted in January 2023. The Order comprises approximately 834 hectares (ha) of land, including 652 hectares for the Solar and Energy Storage Park and 182 hectares for the Grid Connection Corridor. The Environment Statement ALC Report sets out the land Grades to be 73.6 hectares subgrade 3a (11%) and, 548.9ha of 3b (84%).
4. Mallard Pass Solar Farm, comprising land either side and in the vicinity of the East Coast Main Line, near the village of Essendine, (to the north west of Peterborough) with a capacity of 350MW decided by the Planning Inspectorate/Secretary of State on 22 July 2024, EN010127 submitted November 2022.
5. Sunnica Energy Farm (East and West) for 500MW was decided by the Secretary of State on 22 July 2024, following a Planning Inspectorate recommendation to application EN010106, submitted in November 2021. No start date has been identified. The site is 981 hectares and only 3.8% was assessed as BMV Grade 3a, equal to 37.3 hectares in Volume 6 Environmental Statement 6.2 Appendix 12B: Soils and Agriculture Baseline Report.
6. Longfield Solar Farm of capacity 500MW was decided by the Secretary of State based on the report of the Planning Inspectorate application EN010118 submitted in February 2022. The start date was identified as June 2025, and the completion date June 2027. This indicates that around 55ha (12%) of the land within the Order Limits is Grade 2 and a further 101ha (22%) is Grade 3a, giving a total area of 156ha (34%)

BMV. The majority of the site is moderate quality agricultural farmland (Grade 3b) with some smaller areas of BMV agricultural land (Grades 2 and 3a) located throughout the site. It also includes large areas of woodland, ponds, small areas of pasture along with trees, hedgerows and farm access tracks.

Applications Submitted

There are eleven applications submitted with decisions pending: 4 in the East Midlands, 3 in the South East, 3 in the Yorkshire and Humber, and 1 in the North East.

This eastern focus relates to former coal seam geology and the location of grid capacity arising from coal fired power stations that have now been closed. However, the east of the country is where most of the best and most versatile soil is located.

Endnotes

[1] CPRE's Building on our Food Security report, 2022 https://www.cpre.org.uk/wp-content/uploads/2022/07/Building-on-our-food-security.pdf

[2] CPRE's Shout from the Rooftops report, May 2023 https://www.cpre.org.uk/resources/shout-from-the-rooftops-delivering-a-common-sense-solar-revolution/

[3] https://www.gov.uk/government/publications/solar-roadmap

[4] More details on this recommendation can be found in: Renewables UK, Aldersgate Group, CPRE 'Electric Dreams' (Nov 2024), Planning-Project-Report-2024-Final.pdf

[5] Joined up policy and better data key to UK land delivering on 21st century challenges, says Royal Society | Royal Society

[6] https://www.neso.energy/document/346651/download

[7] https://www.gov.uk/government/publications/government-food-strategy/government-food-strategy

[8] https://www.cpre.org.uk/resources/land-use-consultation-a-response-by-cpre-to-defra/

[9] Clean Power 2030: Action Plan: A new era of clean electricity, Table 2 at page 47.

[10] Powering Up Britain

[11] https://www.cpre.org.uk/wp-content/uploads/2023/05/Rooftop-Revolution-Report.pdf

[12] TGN 02-21: Assessing landscape value outside national designations - Landscape Institute

[13] https://hansard.parliament.uk/commons/2025-05-15/debates/9FF0978F-4622-4C71-B8A0-46EB4370E727/SolarFarms

[14] The National Planning Policy Framework, paragraph 187, found at: National Planning Policy Framework - 15. Conserving and enhancing the natural environment - Guidance - GOV.UK

[15] https://www.gov.uk/government/publications/solar-roadmap
https://assets.publishing.service.gov.uk/media/685d6e483e6b7941f4e00afb/35.87_DESNZ_UK_Solar_Roadmap_final.pdf

[16] A report for CPRE February 2025, titled *Decision-making in land use planning and the Agricultural Land Classification System: stick, twist, or bust?*

[17] Review of Agricultural Land Take to Development - NECR578

[18] Extract from Natural England's Review of Agricultural Land Take to Development, January 2025 by Natural England

[19] Renewable Energy Planning Database | DESNZ & Barbour ABI

[20] The economic challenges that farmers have faced in the past decade include:

- impacts of extreme weather – storms, floods and drought – increasingly due to climate change;
- rising costs of key farming inputs (such as machinery, energy and fertilisers);

- changes in farming policy cutting direct farm support payments (which provided on average around 10% of farm incomes); and

challenging markets. Farmers have limited bargaining power in the markets they sell into so margins have been squeezed and the supply chain is often willing to import food produced abroad, often to lower standards, to keep prices down.

[21] https://www.cpre.org.uk/opinions/a-fair-deal-for-tenant-farmers/

[22] https://www.bbc.co.uk/news/uk-politics-65097319

[23] CPRE's Shout from the Rooftops report, May 2023 https://www.gov.uk/government/news/rooftop-solar-for-new-builds-to-save-people-money

[24] https://www.cpre.org.uk/resources/shout-from-the-rooftops-delivering-a-common-sense-solar-revolution/

[25] Net zero emission energy scenarios and land use

[26] More details on this recommendation can be found in: Renewables UK, Aldersgate Group, CPRE 'Electric Dreams' (Nov 2024), Planning-Project-Report-2024-Final.pdf