

Taken from a Facebook group I follow. This £1000 figure was confirmed by a farmer on an episode of Countryfile, aired on 7th April 2024. Surely, if farmers feel that renting their land for a mere £1000 per acre per annum is worth their while, then more needs to be done to make farming more affordable for farmers, to continue to use the land for which it was intended – growing crops. This is all so wrong.



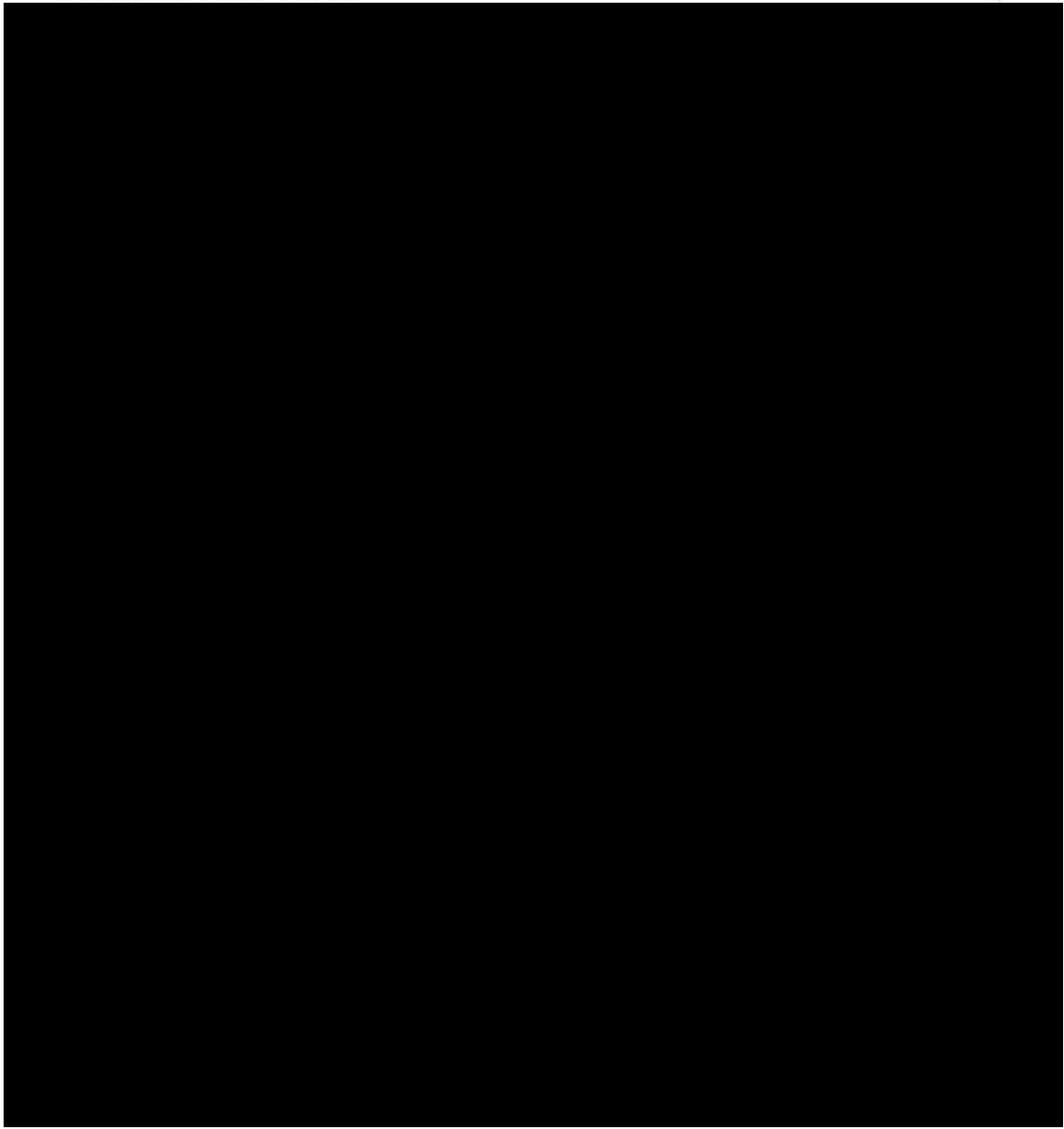
Roof Tops Not Crops

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Farmers diversifying with solar are being fleeced.

At current market prices each solar-clad acre yields around £64,000 annually, they see merely about £1,000 of that.

It's clear—the farmer's land is a goldmine for others, leaving them with crumbs from the table.





 Author

Roof Tops Not Crops

From the total revenue generated by an acre of solar panels (£64,395), the farmer receives £1,000, which is approximately 1.55% of that total revenue. This revenue comes from the annual yield of 225,000 kWh, sold at the current domestic cost of energy, which is £0.2862 per kWh.

Looking at the cost distribution:

The largest share of the revenue goes to the energy supplier in the form of wholesale costs, accounting for 29.28% (£18,854.86).

Network costs, which include infrastructure maintenance and operation that allow for the distribution of electricity, take up 23.37% (£15,049.11) and go to the National Grid.

Operating costs that cover the suppliers' operational activities and business expenses account for 16.34% (£10,522.14).

Environmental and social obligation costs, likely covering government-mandated schemes to support renewable energy and social programs, represent 25.48% (£16,407.85). This is often used to fund renewable subsidies. VAT, which is collected by the government, makes up 4.76% (£3,065.20) of the total.

Other costs account for 2.09% (£1,345.86), which could include administration and miscellaneous expenses.

In summary, the claim that farmers are getting a bad deal can be substantiated by comparing their earnings to the total revenue generated from the solar energy produced on their land. While other entities in the supply chain—like energy suppliers, the National Grid, and the government—receive significantly larger percentages of the revenue, the farmer's share is minimal. This distribution raises questions about the equity of the financial arrangements between solar developers and landowners, and whether the benefits of renewable energy production are being equitably shared among all stakeholders.

Taken from Roof Tops Not Crops Facebook group

February 2024

Rethinking Solar on Farmland: A Closer Look at the Numbers

In the global race towards sustainable energy, the deployment of solar panels on farmland has been heralded as a forward-thinking solution to reduce carbon emissions. However, when we delve deeper into the data and consider the broader environmental impacts, a paradox emerges. Could the widespread replacement of vegetation with heat-absorbing solar panels inadvertently contribute more to global warming than the CO₂ emissions they are meant to offset?

The Greenhouse Thought Experiment

Our thought experiment, comparing two greenhouses—one filled with solar panels and the other with tomato plants—serves as a microcosm for this larger issue. The solar panel greenhouse absorbs sunlight, generating electricity but also emitting heat, whilst the plant-filled greenhouse uses sunlight for photosynthesis, cooling the environment through transpiration and sequestering CO₂.

The question is, which greenhouse would be hotter?

To understand the full impact, we need to consider several key factors:

Heat Island Effect: Solar panels absorb a significant amount of sunlight, converting some into electricity and releasing the rest as heat. This can exacerbate the local heat island effect, potentially raising temperatures in the surrounding area.

Carbon Sequestration: Plants, particularly in agricultural settings, play a crucial role in absorbing CO₂ from the atmosphere. Removing these plants for solar panel installation diminishes the land's capacity to sequester carbon, a critical process in mitigating global warming.

Albedo Effect: Vegetation generally has a higher albedo compared to solar panels, meaning plants reflect more sunlight back into the atmosphere, helping to cool the Earth's surface. Replacing green spaces with dark solar panels reduces this reflective capacity, potentially contributing to temperature increases.

Ecosystem Services: Beyond carbon sequestration, vegetation provides a range of ecosystem services, including supporting biodiversity, regulating water cycles, and preventing soil erosion. The loss of these services can have cascading effects on the environment.

A Call for a Balanced Approach

This analysis suggests that while solar energy is an invaluable part of our transition to renewable resources, its implementation—particularly on farmland—warrants a more nuanced approach. Maximising the use of existing structures, such as rooftops and non-arable lands, for solar panel installation could offer a compromise, allowing us to harness solar energy without compromising the ecological and cooling benefits provided by vegetation.

Engaging in an Informed Discussion

We invite you to engage with this complex issue. By examining the data and considering the broader environmental implications, we can foster a more informed and balanced discourse on the best paths forward in our sustainable energy journey. Your insights and perspectives are crucial as we navigate the challenges and opportunities of integrating solar energy into our landscapes in a way that truly benefits our planet.

I am fully in support of all of the groups against farmland solar projects, including the views of 7000 Acres. Their REP4-088 7000 Acres Deadline 4 Submission - Supporting Video is shocking. In the words of my young daughter, 'what is that disgusting sound?' The thought that we would be surrounded by these in our pleasant and tranquil countryside is extremely upsetting.

This video of the construction of Cleve Hill Solar Park on You Tube is also a true insight into what we will have to endure if this and the other 3 mega solar parks proposed for this immediate area are given the go ahead.

Cleve Hill Solar Park

<https://www.youtube.com/watch?v=lhkTGph-R2E>



[Nik Mitchell Wild](#)

Mr Greg Smith MP, while speaking in the House of Commons on 4th March about farming on behalf of Buckinghamshire, conveyed so eloquently how we are all feeling in Lincolnshire and many other counties across the country. Food production should be the primary focus for farmland. To quote him, 'One way to achieve the absolute opposite of increased self-sufficiency is giving over vast swathes of agricultural land to ground mounted solar installations, battery storage and other large scale development. Roof tops is where solar should be. The thousands of acres being proposed for solar or battery storage for solar in my constituency alone is depressing and wrong'. Towns and villages will be dwarfed by the 10,000's of acres these projects will cover. As he points out a small modular reactor would take up much less space and power many more homes. Land is proposed to be taken for this purpose which is deemed 3b land but is capable of producing a ten ton per hectare wheat harvest. Lincolnshire is known as the bread basket of Britain. The impact on wildlife will be huge. We should be cherishing it and protecting it. Taking away their natural habitat is wrong. This really is a crime against nature and the environment. We regularly see deer, birds of prey, hares, pheasants, badgers. When I read the developers rhetoric about solar parks increasing biodiversity and sheep can graze around it, I cannot believe they can get away with spouting such nonsense. The countryside is vital for people's well-being and these proposals will destroy that. A new Tesla showroom planned for Lincoln will have no solar panels installed on its roof. The irony! How can an electric car manufacturer not want to operate in a self sufficient 'green' way. Take a look at the Bentley factory in Crewe, which has exceeded its target to reduce its production related impact by 75 percent over 15 years, with a number of initiatives, including solar on the roof and car park canopies. It can be done. Households with electric cars should have solar panels enforced at their

property to generate the extra electricity they will be using. I've said it before and I'll say it again, this whole process has been extremely overwhelming, confusing and time consuming. I think many residents haven't really known how to raise their objections. The fact Lincolnshire is being bombarded with so many solar park proposals is wholly unfair. I have lost count of how many proposals have been put forward for Lincolnshire, I believe it is around 13 large scale parks. I implore you and the government to end this ground mounted solar nonsense for good.

Bentley Factory in Crewe





BENTLEY'S 10TH ANNIVERSARY SOLAR INSTALLATION



Celebrating the 10th anniversary of solar power at carbon neutral 'Dream Factory' with 5,608 new panels.

Able to generate **10MW** of power in total, that's enough to power

2,370 HOMES

Total area of **61,000m²** equal to **9** football pitches or **311** tennis courts

Installation will take the number of panels on the Crewe factory to **36,418**



NEW INSTALLATION

Number of panels: **5,608**

Total area: **10,436m²**

Total power: **2.159 MW**



LOCATION OF THE NEW PANELS

SOLAR PANELS ALREADY IN PLACE ACROSS THE SITE

ROOF SYSTEM

CAR PORT

Number of panels: **30,810**

Total area: **50,474m²**

Total power: **7.898 MW**

Total solar power produced across the site following the anniversary install will be: **10.057 MW**