RWE

RWE Reflections

Harvesting the sun

A spotlight on Clare Wise, an award-winning farmer from County Durham

Supporting British farming

Solar farms are essential for decarbonising the UK's power system and offer British farmers a valuable opportunity to diversify their income. By using some of their land to host solar farms, farmers can make their businesses more resilient against the impacts of climate change, which are already affecting crop yields and farm revenues.

RWE contributes £2m annually to farm businesses through land rent payments, a figure set to grow. This steady source of income ensures the long-term sustainability of their operations and enables British farmers to continue producing food on their most productive fields.

Clare Wise

Award-winning cattle, sheep and arable farmer, and RWE partner

Clare is an active member of several farming organisations, including her local NFU and grazing groups. Her mixed cattle, sheep and arable farm in County Durham has been in her family for five generations. Ensuring the farm's financial and environmental sustainability is a priority for Clare, as she aims to preserve it for future generations.

For over 140 years, the Wise family has loved and enhanced the local landscape and environment while actively participating in the community. The next generation is eager to continue farming and being responsible stewards of the land.

Clare's farm prioritises both food production and environmental sustainability, with a commitment to achieving net zero.

This includes the installation of solar panels on her farm, showcasing British farming as part of the solution to climate change.

Clare's business also supports the local economy by using local suppliers and contractors and reinvesting in her community. She also prioritises animal health and welfare, using the latest agri-tech and soil management techniques to maximise sustainability and livestock productivity.

Here is our interview with Clare, where she discusses her decision to become an RWE partner and what it means for her business.

Why did you decide to diversify your farm business by introducing solar?

"This isn't about us becoming rich. This is impossible with the economic conditions we're facing. Currently, farm incomes are barely minimum wage and are falling. Our farm type, mixed farming, has been hit the hardest year after year. The previous Government's trade deals are going against us, and the volatile weather is seriously damaging our yields. This means we have no profit to reinvest and drive our business forward. Without reinvestment, our yields will fall, environmental impacts can't be properly managed, and animal welfare is compromised.

"Much is made of food production versus solar, but the reality is without this diversification our business cannot survive. As subsidies have been removed, input costs have skyrocketed, and climate impacts worsen, we've no option but to look to diversification. This really is an issue of survival for a mid-sized family farm like ours.

"Many farms like ours are now on a knife edge financially. By denying us the opportunity to diversify, it takes away the very people who keep the countryside looking and producing as it does now, who know the habitats, biodiversity and production capacity best. Diversification like solar provides us with a secure income to reinvest, allowing the rest of our farm business to thrive and grow.

"There is a wrongful assumption that 'good productive land' is automatically profitable. On our land, three winters of failed crops due to wet conditions, trebled input costs, and falling sale prices have demonstrated this is no longer the case. Instead, we must be clever about land use and maximise the best land while finding alternatives for our lowest-producing areas, such as the fields we decided would be good for solar.

"In short, we chose solar as it is clean energy, aligned with our commitment to a net zero future for farming. Most of all, without a secure diversified income, our farm can no longer be profitable from food production alone. To protect the mainstay of our business, we seek alternative land use for our worst-producing land so we can invest and grow food production from the remaining farmland.

"Our commitment to this land goes on for generations, long beyond us. The whole family carries a heavy moral burden to make the farm sustainable for generations to come. To be part of a project that not only achieves our own ambitions for a net zero future but also provides a secure income stream to invest in the farm and make it viable for years to come is incredibly important to us as a family business. We believe farmers must diversify to survive, and what better way than providing clean energy for the same people we provide healthy and affordable food. We believe this project offers the best of both worlds."

"Much is made of food production versus solar, but the reality is without this diversification our business cannot survive."

How will the revenue from this project impact your farm business?

"This revenue would be revolutionary for our business after years of being unable to reinvest. We are committed to sustainable food production and environmental protection, so smart farm machinery is top of our wish list for the future.

"We would reinvest into improving the soils to enhance productivity and increase carbon storage, which also supports achieving net zero. We would upgrade equipment to get better yields on the other fields, invest in precision technology to minimise environmentally harmful inputs such as nitrogen and invest in better handling equipment to improve livestock welfare and our own safety. All this would be done through local dealerships so the money is reinvested locally. It would entirely reinvigorate our business and make it sustainable long term.

"Also, we'd like to employ a member of staff. We currently work dangerous and unsustainable hours for barely minimum wage. Our farm should have 4 full-time staff given its size, but we struggle by with just 2 currently. This also means we have no work/life balance. So, the chance to employ local staff would be sensible both for health and safety and good for the local community. We would also happily take on local apprentices if there is the revenue for it. This would also allow us to increase food production by increasing livestock numbers, which we can't do currently due to staffing, but we very much want to.

"I also have hopes of running an educational outpost, ideally with children who would otherwise never see a farm, but at the moment lack of staff and funds means we do occasional visits for urban catchment children but can't commit to a regular timetable. It would be wonderful to expand this offering."

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Would your farm business be sustainable without the income from solar?

> **“Solar is a small amount of the farm but gives life to what remains actively farmed.”**

“No, our business is not sustainable without this diversified income. Our input costs have trebled, and volatile weather has made crop establishment on the fields going into solar impossible. Climate change is the biggest factor in the unsustainability of our farm’s future. We planted over 300 acres of rape and corn in autumn 2023, and by January due to the relentless wet weather only 20% had survived. It was all to plant again, doubling the cost and wiping out any profit. Some fields we had to try planting a third time, and any yields will be down 40% as much of the crop will only be suitable as animal feed.

“Sadly this has now been the case the last 3 winters. As winters get wetter and we are on heavy clay land which is prone to waterlogging, crop establishments and yields are suffering heavily. The summers are also dry and droughty here, so summer grain crops are also seeing reduced yields. The reality is these fields would be taken out of food production one way or another, as they are economically unviable due to climate change.

“At least the solar income would allow us to reinvest in different machinery and techniques to mitigate the worst effects. The alternative is putting this land into government environmental schemes, which would mean taking much more of the farm out of production. Solar is a small amount of the farm but gives life to what remains actively farmed.”

How much land will you continue to farm in addition to the areas used for solar?

"The solar project would only take up around 15% of my farm. That leaves the other 85% of the best and most productive land being used for food production. Plus, as we plan to use the land beneath the solar for grazing an extensive low input sheep flock – which we would establish in addition to our existing intensive flock – we are actually looking to increase livestock numbers if solar is successful and boost our food production even with putting solar on a portion of our land."

Clare's journey demonstrates how solar not only supports farm businesses to diversify their income but also strengthens their resilience against climate change. By integrating solar panels into her mixed cattle, sheep, and arable farm, Clare is securing a sustainable future for her business and her community for generations to come.

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