

Blog: Solar for Nature

Reflections from Langenhoe Solar Farm: A visit with Natural England

Too often, solar gets trapped in false choices: energy or nature, food or climate, infrastructure or landscape. But when on site, you're standing in a field, boots on the ground, looking closely at what has actually changed, the conversation becomes simpler and more practical: is the land under management doing better for nature than it was before, and can it keep improving over the decades ahead?

That's why we were delighted to welcome a delegation to Langenhoe Solar Farm in Essex at the end of last month. This included Tony Juniper (Chair) and Marian Spain (CEO) from Natural England - a key environmental regulator for solar - alongside industry body Solar Energy UK. Building on constructive engagement during recent years of solar expansion, the conversation was about evidence, outcomes, land management and the ways in which growth and nature can go hand-in-hand.

Why Langenhoe matters

Langenhoe generates clean, affordable electricity for around 8,000 homes, directly supporting the UK's Clean Power 2030 ambition and energy security needs. Climate change is one of the biggest drivers of nature loss, and if we are serious about protecting and restoring wildlife at scale, we have to be equally serious about cutting emissions from the energy system. For me, decarbonising the economy is one of the most important things we can do for nature.

But the second point is just as important, and it's often missed in the headlines: how solar can enable large-scale use of land for nature.

Langenhoe covers 34.5 hectares, yet only around 4% of the site is built environment: tracks, inverters and infrastructure. That means nearly 96% of the land remains open and available for habitat recovery, as well as food production such as grazing.



Hing Kin Lee
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What was there before matters

One of the most interesting parts of the visit was talking about what the site looked like pre-development. Back in 2013, the site was intensively farmed land, with oilseed rape growing up to the southern border and the marsh edge of the adjacent Colne Estuary, which formed part of the site boundaries.

Instead of edge-to-edge monoculture maintained with fertiliser and pesticide, you can now see and measure a diverse mosaic, deliberately managed to support wildlife and improve soil health. The site operates under a dual land-use model, retaining productive agricultural use through winter sheep grazing, while also delivering meaningful ecological outcomes. A dedicated buffer to the adjacent Colne Estuary protected area strengthens the ecological connection between land and water, with the solar farm directly supporting the overwintering geese that depend on the estuary.

That history matters because it reframes the question. The relevant comparison isn't 'what would an untouched nature reserve look like here?'. It's 'what did the land use actually deliver before, and what can it deliver now, over decades, if we manage it for nature?'.

Beyond compliance

At Langenhoe, nature recovery goes beyond standard planning requirements. The site is already delivering 68.4% Habitat Biodiversity Net Gain (BNG) compared to its pre-development state. On top of that, a dedicated Nature Management Plan is in place which has delivered a further and measured uplift of 11.3% BNG.

In practical terms that are visible on the ground, this means that the site margins have been sown with species-rich wildflowers, that build floral diversity and support invertebrates. Conservation grazing by sheep is used over winter to improve sward structure, soil health and habitat value. Newly planted native hedgerows are also now flourishing under management, strengthening ecological connectivity and providing shelter for local species.

The site therefore provides targeted support for priority birds including Nightingales, with nesting interest for Corn Bunting, and an invertebrate community that includes the common blue, Essex skipper, small copper, small heath, and small tortoiseshell butterflies. Indeed, 2025 recorded strong early-season butterfly diversity, with the highest number of species observed on site to date.

Working next to an SSSI, SPA and Ramsar site

Langenhoe sits adjacent to the Colne Estuary, designated as an SSSI, SPA and Ramsar site. That context makes partnership working essential. The question isn't whether development should acknowledge important wildlife areas; it's whether it can actively support the objectives of the wider estuary system.

During development, ecological buffers were embedded into the site's design and ongoing management to create functionally linked winter grazing for Brent geese, helping to relieve the existing pressures from farming immediately adjacent to the protected areas.

Specialists, landowners, and rural economies

Another theme that resonated strongly during the visit was the value of collaboration. We partner closely with long-standing ecological specialists, such as Wychwood Biodiversity, to assess sites carefully, design interventions, and optimise biodiversity gains. That technical input is vital, but so is the relationship with the landowner and grazing partners, so that nature recovery can be delivered year on year.

Across our wider portfolio, we're also seeing landowners forming local companies to provide services like operations and maintenance, supporting local employment and rural economies. And importantly, solar can support the resilience of farming businesses: stable farm income can help landowners invest in better land stewardship, while improved pollination and soil quality can benefit the wider estate.

Some takeaways

When champions of nature see the on-the-ground reality of a well-designed operational solar farm, it becomes easier to talk about how we scale solar well, rather than whether we should scale it at all.

The visit reinforced the strong strategic alignment between clean power and nature recovery, whereby well designed and managed solar can deliver for both. A comprehensive spatial understanding of solar deployment could support Natural England's existing landscape-scale perspective, enabling more informed and strategic decisions on cumulative outcomes for energy, biodiversity and placemaking.

As solar capacity needs to triple to meet Clean Power 2030, the question is not simply one of scale, but of quality: how we deliver energy security and affordability while measurably improving land for nature. Standing at Langenhoe, beside one of the UK's most important estuary systems, that ambition felt real and achievable. At NextEnergy Capital, we are committed to supporting nature-positive investment in solar farms and energy storage.

Learn more about how we do this [here](#).

