

LLANWONNO ENERGY PROJECT

SITE DESIGN EVOLUTION SUMMARY

Top row from left:

- 2019: Wider area search prospecting suitable topography on land north of Llwyncelyn.
- 2019: Some areas could accommodate a large wind farm. Indicative layouts were produced.
- 2019: Pastureland at the south was assessed and found to be most suitable for turbines – initial layout was produced.
- 2020-2023: Noise, shadow, wind shear, coal, peat and ecology studies undertaken.

Bottom row from left:

- 2023-2024: wider landscape surrounding the site was assessed for viability of additional solar to increase the project's overall generation capacity. The University of South Wales want to partner to take electricity from Llanwonno Energy to power their Treforest Campus towards a ground breaking net zero campus. As a result, Cenin implemented increased generation on site on topography that lends itself well to south facing solar photo voltaic opportunities.
- 2024 onwards: a stand-alone scheme was designed to be entirely separate from the consented Llwyncelyn scheme but would share its trunk road for efficiency purposes. The site layout design went through several iterations resulting in a robust final design incorporating solar panels, eight wind turbines with individual tower heights to fit in the landscape, and a BESS energy storage facility.
- The final design freeze layout was produced in GIS format to incorporate an improved solar layout, updated BESS design, improved track layout and construction compound.

