

FAQs

GMPV

Battery

AD



What is the impact on the land?

Panels are mounted on frames with minimal ground disturbance and no concrete needed. Grass and crops grow beneath bifacial panels, soil health improves over time, and sites are managed to enhance biodiversity.

Do solar farms work in more northern locations?

Yes. PV performs very well in cooler climates. Andreas receives 12% more sunlight than Ronaldsway, is flat with no peripheral shading, and benefits from coastal refracted light.

What happens to the panels in high winds?

Arrays are designed and engineered to withstand localised wind loading and are resistant to the severest storms.

What disruption is caused managing a solar array?

Very little. Routine checks are bi-annual, with most land management carried out by grazing sheep.

Do all solar panels come from China?

China dominates the market, manufacturing 80% of panels and supplying 95% of solar wafers and cells, but not all panels are Chinese-made.

Are Vanadium Flow batteries safe?

Yes. Non-flammable water-based electrolytes mean no fire risk, making them ideal for long duration energy storage.

Which type of battery is best?

Flow batteries suit long duration steady discharge; lithium batteries are more compact and dynamic, better for shorter-term specific power needs.

Could the AD plant explode?

Risk is carefully managed through DSEAR (Dangerous Substances and Explosive Atmospheres Regulations) assessment, ATEX-compliant equipment, trained staff and sealed digesters. The plant operates to UK safety standards with DEFA.

Will the AD plant smell?

No. The process occurs in sealed vessels. Strict environmental regulations prevent the release of odorous gases.

What will be fed to the AD plant?

A combination of purpose-grown energy crops and agricultural wastes and residues. No food or human waste will be fed to the plant.

Can traditional farming continue under solar panels?

Yes. Most sites are grazed by sheep, but can also support crops, fruit, trees and larger livestock. This is known as Agrivoltaics.

Do solar farms cause glare?

Panels absorb ~95% of light and are less reflective than tarmac. A site-specific glare evaluation is carried out to mitigate any risk through design.

How long does construction take?

Approximately 12 weeks to construct the array and a further 12 weeks to complete electrical works and energise the site.

What happens when the solar array reaches end of life?

Arrays last 40+ years and can be re-energised beyond this. If decommissioned, the site returns quickly to agriculture and up to 99% is recyclable.

Are Lithium Ion batteries safe?

Yes, if well designed. Thermal runaway risk is managed through cell-level containment, active fire suppression, smart battery management systems, and stable LFP chemistry.

Why are batteries needed?

To balance the electricity network, store excess power, and ensure continuity of supply if the primary grid fails.

Can batteries be recycled?

Yes. ~90% of minerals can be recovered from lithium-ion batteries, and vanadium flow batteries are ~97% recyclable, including 100% of the electrolyte.

Will the AD plant be noisy?

AD plants are designed with acoustic attenuation. Noise levels will be no greater than those of a typical livestock farm, with acceptable levels agreed through planning.

Will the AD plant create significant additional traffic?

Traffic movements will increase but will be seasonal and controlled. The farming co-operative supplying feedstock will agree transportation routes and practices in advance.