

Agricultural photovoltaics – otherwise known as agrivoltaics or agri-PV projects – are the leading form of dual land use which combine solar energy generation with agricultural production.

Addressing climate and nature synergistically - why?

Climate change and nature loss are intrinsically linked. Fossil fuel reliance is one of the largest contributors to climate change, which in turn is the primary driver of nature loss. Agriculture relies on nature, which is key to our prosperity. Integrating clean energy with sustainable agricultural production through agrivoltaics technologies amplifies benefits for people and nature.

With careful site design and management, solar farms can play a key role in ensuring energy security whilst guaranteeing food sovereignty. They prevent ecosystem degradation which makes communities more resilient to physical climate risks. They also deliver benefits to investors, creating portfolio diversification and resilience-building opportunities to enhance long-term, risk-adjusted financial value within a low-carbon, nature positive future.



1 What are Agrivoltaics?

The world is grappling with solving both the Energy Trilemma – balancing energy security, energy equity and environmental sustainability – and securing food sovereignty. Dual land use programmes shift the discourse away from competition and towards a new paradigm based on synergies. Agrivoltaics are the leading form of dual land use which combine solar energy generation with agricultural production. They are a versatile technology which can be adapted to local environmental contexts, agricultural heritage and rural development priorities. Examples include productive nature-based enterprises, such as sheep grazing and interrow cropping between solar PV panels.

2 What is the investment opportunity?

Solar PV is the most scalable renewable energy technology. When coupled with agricultural systems, it is a cost-effective solution to transition to clean energy whilst promoting a modernised, more prosperous food system. For farmers and landowners, co-locating solar PV with agriculture bolsters income by improving agricultural yields through beneficial shade for animals and crops and generating two revenue streams from the same land. For investors, agrivoltaics de-risk portfolios and enhance returns across three dimensions:

- → Diversification and resilience: Agrivoltaics introduce operational flexibility and resilience to land use conflicts and permitting delays. They are a hedge against policy shifts while aligning with net zero targets. Agrivoltaics with sheep grazing are already successful in the UK and cultivation has been tested and proven across mainland Europe and the US. As calls grow to ramp up transition finance to meet national decarbonisation targets, investors have a unique opportunity to capitalise on the value enhancement synergies between utility-scale solar PV infrastructure and agriculture to create a low-carbon, food-secure future.
- → Regulatory alignment and incentives: Agrivoltaics are increasingly embedded in national energy and land use policy frameworks. Developing agri-PV assets prepares for evolving regulation, unlocks public funding, and de-risks development pipelines.
- ➤ ESG value creation: Solar PV already stands out among other renewable technologies due to its minimal environmental impact, limited noise and sight pollution, and numerous socio-economic and community benefits. Agrivoltaics introduce additional opportunities to restore nature and empower landowners, ultimately driving outperformance on exit for investors.

3 What is NextEnergy Capital doing in this space?

Integrating nature into decision-making is the norm at NextEnergy Capital. We have been pioneering biodiversity initiatives and solutions on our solar sites for almost 20 years. The accelerating energy transition gives us an excellent platform for continued growth. True to our Group value to "Be an Innovator", we are developing and enhancing our capabilities to promote an investment model with a triple positive impact for energy security, food sovereignty and financial resilience.

In our UK-based funds, NextEnergy Solar Fund and NextEnergy UK I, more than 65% of the land our projects occupy is managed under dual-land use regimes, including 47% with sheep grazing. On one solar PV asset in Somerset, we are progressing a pilot programme to grow a stepover apple orchard amongst the solar panels on a section of the site. The grassland in the field surrounding the step-over orchard will also be enhanced to create a wildflower meadow.



CASE STUDY - Project Giugliano, Italy

Advanced legislation and strong government incentives – such as subsidies of up to 40% of CAPEx for dual land use projects – have positioned Italy at the forefront of agrivoltaics development. NextPower V, NextEnergy Capital's fifth fund, is already benefiting from this regime through the acquisition of its first agrivoltaics project in Campania, Italy, in June 2025. Project Giugliano combines a 73MWp utility-scale solar asset with modern, sustainable agriculture. It is one of the largest agri-PV projects in Italy and under construction at the time of publication. Once operational, it will restore 140 hectares of land while producing clean electricity. At least 70% of the restored land will be dedicated to agricultural activities, including planting crops such as tomatoes and "friarielli", a cruciferous vegetable which originates from Campania and is a staple in southern Italian cuisine.

Guided by NextEnergy Group's <u>Nature Strategy</u>, we will continue to combine our expertise with the trusted partnerships we have built with our landowners and communities to offer attractive investments within de-risked, nature positive portfolios to our investors. We hope you found this whitepaper informative and engaging, please do not hesitate to get in contact with the NextEnergy Capital team should you wish to discuss any aspects further.

