solaredge

Get the Most Out of Agri-PV and Dual-Land Use

Boost Energy Production and Crop Yields

83% of new solar projects in the US are expected to be installed on farmland (source↗), and it's estimated that farmers will lease over 2 million acres of agricultural land for solar projects by 2030 (source↗). Agrivoltaics is rapidly growing and represents a significant opportunity for stakeholders in this sector.

There are already more than 7GW of agrivoltaics sites across the US (source↗), and supportive regulations and incentives at both federal and state levels (Colorado, New Jersey, New York, Maryland, and Ohio) are set to help the sector grow. Agrivoltaics is a critical way companies and communities can make progress toward renewable energy goals and generate revenue.

SolarEdge DC-Optimized Solutions for Agri-PV & Grazing Applications

SolarEdge TerraMax™ Inverters for Large-Scale Applications

Designed for success no matter the complex site topography, the TerraMax inverter gives innovative design flexibility. This lets you fit morepanels on your site and helps cut BoS costs by up to 50%.

Three Phase Inverters with Synergy Technology for Small-Medium Applications

Keep costs low with modular design and provide confidence with more advanced built-in safety features, no other solutions provides.

Power Optimizers

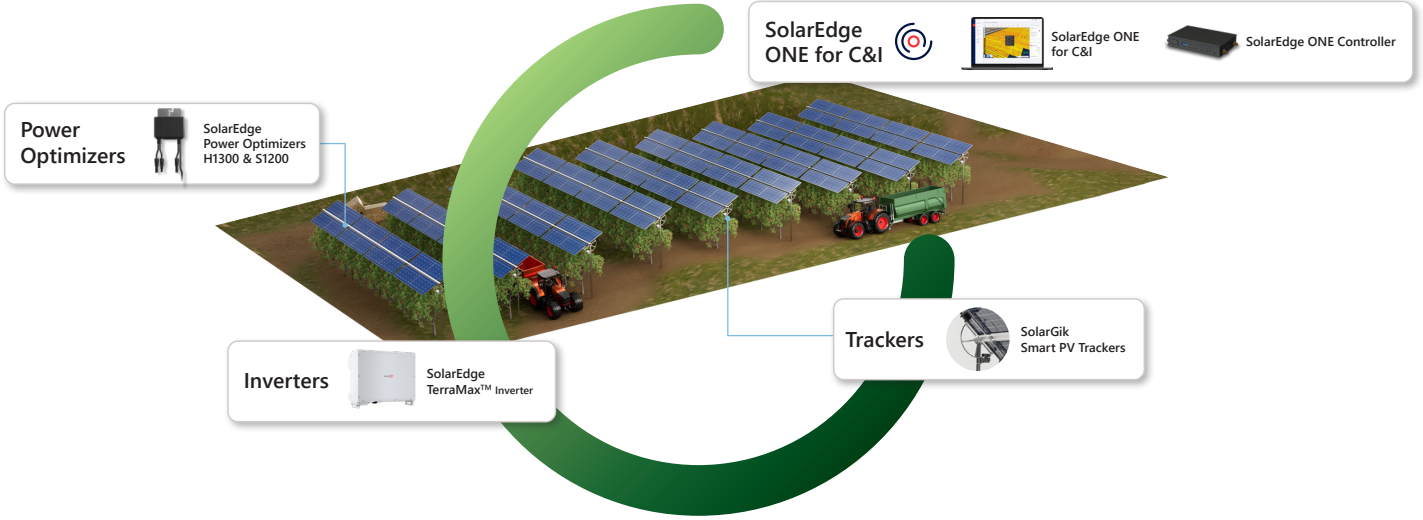
SolarEdge Power Optimizers with DC optimization ensure that individual PV modules produce at their maximum energy level, regardless of module orientation or shade/dirt exposure. The optimizer has the built-in SafeDC™ feature to shutdown in any fault scenario, contributing to lower insurance costs which can enable research, energy planning and plant growth optimization.

SolarGik Smart PV Trackers

With short tracker table size ranging from 8-24 panels and weighing 20-40% less than standard trackers, SolarEdge's PV trackers allow installation flexibility on slopes and around obstacles while preserving easy access to crops.

SolarEdge ONE Platform for C&I

Algorithms analyze data, generate energy forecasts and help users make better informed real-time energy decisions. Manage one site or a fleet spanning the world with granular panel monitoring and automated notifications with this built-in platform that rivals paid services.



A Proven Solution for Better Agri-PV Results

Produce More Energy By Tackling Mismatch Losses in Agri-PV Sites

Shading, soiling, and dust result in increased mismatch loses at Agri-PV sites. SolarEdge Power Optimizers help overcome these challenges and produce 3-6% more energy.

Cut the balance of system (BoS) costs by up to 50%

DC-optimized solutions enable module-level monitoring with fewer and longer strings resulting is lower cost for cabling, fuses and labor.

Better Land Utilization Through Design Flexibility

Site on uneven land, at different orientations and with more panels in the same space. SolarEdge Inverters and Power Optimizers, paired with SolarGik trackers, give Developers the design flexibility to site projects on undulating land and use uneven strings to optimize their space to add more panels.

Meet the most up-to-date PV safety regulations and insurance requirements

We've developed built-in safety features, ensuring maximum protection of people, property and livestock. Features include SafeDC™ which is designed to automatically drop DC voltage to touch-safe 1V DC.

Boost Yields for Bifacial & Vertically Installed Panels

The uneven light distribution on the rear side of the bifacial panels can cause mismatch loss of more than 10%, rising to 30% for vertical installations.[1] SolarEdge Power Optimizers help mitigate these mismatch losses for higher energy yields.

Improve O&M Efficiency with Module-Level Monitoring and Site Management Softwar

SolarEdge module-level monitoring allows granular data collection in Agri-PV sites. This helps improve O&M efficiency and reduce site visits.

1 Based on SolarEdge Monitoring Platform data taken from rooftop vertical installations.

Get Innovative Monitoring with the SolarEdge ONE for C&I Platform

Our cloud-based energy optimization platform provides real-time data, integrates seamlessly with third-party sensors and can help reduce O&M costs.

Maintenance needed for Agri-PV can be complex and have higher costs since the modules are elevated and access to the farm can be limited. SolarEdge ONE algorithms can help users make better informed decisions, reduce truck rolls and shorten maintenance visits.

Real-time data analytics to maximize energy efficiency

SolarEdge ONE is designed to automatically and constantly manage site energy production and consumption based on dynamic algorithms factoring in:

- An agrisolar site's energy profile and needs, historical production and consumption rates, and future predictions.
- External parameters, such as historical, current and predicted electricity price tariffs and weather conditions.

The Bottom Line

SolarEdge's field-proven, innovative technology helps farmers and solar developers generate success. Contact our Agri-PV experts to get started.

SolarEdge Technologies is a global leader in renewable energy technology for commercial, utility, and residential customers. SolarEdge optimizes energy generation, storage, management and consumption. The company develops and produces PV inverters, Power Optimizers, energy management solutions, energy storage, and grid services. More than 50% of Fortune 100 companies have SolarEdge technology on their rooftops. SolarEdge is helping accelerate the global transition towards distributed, sustainable energy.

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