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About BayWa r.e.

At BayWa r.e. we r.e.think energy - how it is produced, stored and can be best used to enable the global renewable energy transition that is essential to the future of our planet.

Based in 34 countries, with revenues of almost €5.8 billion, BayWa r.e. is a leading global renewable energy developer, service provider, distributor and energy solutions provider. Operating throughout Europe, the Americas and Asia-Pacific, we are strategically investing in emerging markets around the world, actively shaping the future of energy and taking a stand against climate change.

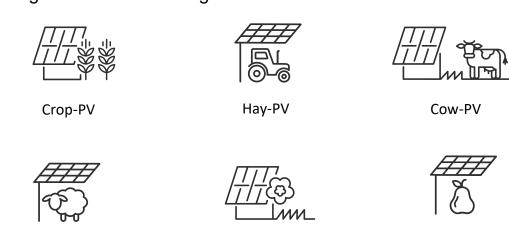
BayWa r.e. delivers end-to-end project solutions involving planning, development, construction, and ongoing operations management. Using our innovation, creativity and expertise, we have successfully brought over 6 GW of renewable energy online and manage over 10.5 GW of renewable energy assets, ensuring they operate at peak efficiency for our customers. We are also an Independent Power Producer with a growing portfolio and an expanding energy trading business.

BayWa r.e. is working with businesses and organisations worldwide to provide tailored renewable solutions that reduce carbon footprints and drive down energy costs. Operating 100% carbon neutral, we are also committed to our own sustainability journey and are driving forward multiple social, environmental and economic initiatives globally. As a leading global supplier to the solar distribution market, we provide a comprehensive range of products and industry leading customer support. Through first in class training, logistical expertise and online services, BayWa r.e. is a preferred partner for thousands of installers and contractors.

Embracing equity and diversity, we are committed to creating inclusive environments where everyone can reach their full potential. Every day, we are working hard to find new solutions, push technological boundaries and redefine service standards to make renewable energy even better.



Our joint shareholders are BayWa AG, a globally successful business with revenues of €23.9 billion, and Energy Infrastructure Partners, a market leader in energy infrastructure investment that manages over €7 billion from global investors.



Our Agri-PV activities at a glance:

Grazing-PV

Eco-PV



Fruit-PV

BayWa r.e.'s Agri-PV mission:

Certainly:

- We enable simultaneous production of sustainable food and solar PV power on one and the same area, maximizing land use efficiency.
- By preserving our natural environment and securing fruitful soils for food production, we promote sustainable agriculture.
- Additionally, we increase farmers' resilience by facilitating their climate change • adaptation and mitigation strategies, ensuring long-term viability in agriculture.

Agri-PV is in our DNA

At BayWa r.e., agriculture is deeply ingrained in our DNA, thanks to our mother company, BayWa AG. We are dedicated to preserving the natural environment and safeguarding soil for food production. Leveraging our extensive knowledge and support, we offer comprehensive assistance in Agri-PV systems, from plant physiology to operational management, ensuring the success of every project.

Together with BayWa AG, we harness the synergies between agriculture and clean energy, utilizing global expertise in utility-scale PV engineering. Our innovative approaches, such as Interspace PV, enable the symbiotic generation of food and clean energy on the same land, significantly increasing land-use efficiency and delivering ecological and techno-economic benefits for farmers.



Our references

Agri-PV includes all these applications:

Crop-PV

At BayWa r.e., Crop-PV represents the innovative integration of photovoltaic (PV) systems with arable farming, promoting sustainable energy production alongside agricultural activities. Crop-PV systems, depending on the hub height of the trackers, can be classified as Interspace or Overhead Agri-PV topologies. This approach allows farming practices to continue between and/or below the PV modules, with a dedicated farmer managing agricultural operations for the entire lifespan of the project (around 30 years).

Our design includes a larger pitch to facilitate the movement of farming machinery, optimized cable consumption, and park modifications for unobstructed and safe equipment operation, including deeper cable ditches. Through careful construction practices, we minimize soil damage and perform shading analyses to ensure limited impact on crop yield.

Higher structure designs help avoid shading on crops, accommodating different substructure procurement and more complex construction requirements. Crop-PV at BayWa r.e. supports diverse agricultural activities, such as cultivating cereals, rapeseed, potatoes, and beets, demonstrating our commitment to innovative, sustainable farming and energy solutions.

This dual use of land increases the land equivalent ratio (LER) and fosters techno-ecological synergies, leading to higher biodiversity and larger area potential. By contributing to the energy transition and allowing parallel use of agricultural land, Crop-PV diversifies farmers' income and enhances the overall sustainability of agricultural practices.





Hay-PV

At BayWa r.e., Hay-PV embodies the innovative fusion of photovoltaic (PV) systems with grassland farming, fostering sustainable energy production alongside agricultural activities such as feed and hay cultivation. Depending on the hub height of the trackers, Hay-PV systems can be categorized as Interspace or Overhead Agri-PV topologies. This configuration allows farming to continue seamlessly between and/or below the PV modules, with a dedicated farmer managing the agricultural operations throughout the project's lifespan (approximately 30 years). To integrate our PV system into the farming process, we adapt the technical, legal, and commercial setup of the Special Purpose Vehicle (SPV) accordingly. Our design includes modifications to the park layout for unobstructed and safe machinery movement, a larger pitch to facilitate equipment operation, optimized cable consumption, and deeper cable ditches. By employing careful construction practices, we minimize soil damage and conduct shading analyses to ensure limited impact on crop yield. Higher structure designs help prevent shading on crops, accommodating different substructure procurement and more complex construction requirements. Through the combination of PV systems with grassland farming, Hay-PV at BayWa r.e. exemplifies our dedication to innovative, sustainable farming and energy solutions, enhancing the dual use of land and contributing to the diversification of farmers' income.





Cow-PV

At BayWa r.e., Cow-PV refers to the innovative combination of photovoltaic (PV) systems with cattle and cow, or other larger animal livestock farming, enhancing both sustainable energy production and agricultural practices. Belonging to the Overhead Agri-PV system topology, Cow-PV enables continuous farming activities between and below the PV modules. This hybrid product supports cattle grazing from March to September and accommodates hay machinery operations in-between the modules. The design offers numerous synergies, including techno-ecological benefits such as increased land-use efficiency (LER up to 200%), enhanced animal welfare through heat stress mitigation, and improved water-use efficiency due to reduced evaporation. Socio-economic advantages include tapping into further land potentials, streamlined permission procedures, and increased public acceptance. Cow-PV also promotes extensive grazing, integrates rainwater harvesting systems, and ensures animal welfare by preventing injuries with inaccessible cables and avoiding muddy areas that promote claw diseases. Additional features like cow brushes for grooming and controlled noise levels of inverters ensure no adverse effects on animal welfare. BayWa r.e.'s Cow-PV highlights our commitment to sustainable farming and energy solutions, optimizing land use, and supporting farmers' livelihoods.

Grazing-PV

At BayWa r.e., Grazing-PV is the innovative integration of photovoltaic (PV) systems with small animal livestock farming, such as sheep and chickens. As an interspace Agri-PV system, Grazing-PV enables continuous farming practices between and below the PV modules. This approach ensures active agricultural management by a dedicated farmer throughout the project's 30-year lifespan. Our design features include cable protection to prevent animal injuries, shelters to protect animals from rain and extreme temperatures, and construction methods that minimize soil damage. The larger pitch allows for the free and safe movement of animals and machinery, optimizing cable consumption and enhancing grassland productivity. By distributing fodder production throughout the year and utilizing higher structures to prevent animal injuries, Grazing-PV maintains minimal impact on grassland yield. BayWa r.e.'s Grazing-PV exemplifies our commitment to sustainable farming and energy solutions, maximizing land use and supporting farmers' livelihoods.







Eco-PV

At BayWa r.e., Eco-PV represents the innovative combination of photovoltaic (PV) systems with biodiversity measures managed by farmers. As an interspace Agri-PV system, Eco-PV supports diverse ecological practices such as flower strips, pollinator and bee keeping, insect hotels, bird housing, seed mixes for soil regeneration, insect-friendly grass-cutting, and habitat creation for amphibians, birds, and small mammals. Farming practices are executed between and below the PV modules, promoting soil health and pollination while enhancing the overall resilience of the ecosystem. By incorporating nature-friendly designs, our solar parks significantly boost biodiversity, supporting pollinating insects like wild bees and benefiting neighboring agriculture. Increased insect abundance provides food for many breeding bird species, fosters humus formation, CO2 sequestration, and soil fertility. Wide, sunny strips between PV rows create habitats for butterflies, grasshoppers, breeding birds, and reptiles. Eco-PV underscores our commitment to combating climate change and biodiversity loss simultaneously, demonstrating that renewable energy production can enhance ecological balance and biodiversity. With adequate distance from fencing, small animals like hedgehogs and hares can also thrive in our solar parks, making Eco-PV a cornerstone of sustainable and environmentally friendly energy solutions at BayWa r.e..





Fruit-PV

At BayWa r.e., Fruit-PV represents the innovative combination of photovoltaic (PV) systems with the cultivation of berries, pome and stone fruits, nuts, almonds, citrus, and viticulture. As part of the Overhead Agri-PV system topology, Fruit-PV allows farming practices to continue beneath the PV modules, optimizing the use of agricultural land. This dual-use approach provides significant benefits, including savings on crop protection infrastructure, reduced water demand, and improved fruit marketing. By integrating additional subsystems like rainwater harvesting and digital farming, Fruit-PV not only enhances crop protection and reduces working hours but also contributes to the energy transition. With a project lifespan of 30 years, Fruit-PV supports sustainable agriculture and energy solutions, positively impacting the Water-Energy-Food (WEF) Nexus and reducing land lease costs. BayWa r.e.'s Fruitvoltaics showcases our commitment to diversifying and advancing the farming sector through innovative, eco-friendly practices.

