

The EU solar energy strategy published in May 2022 as part of REPower EU sets ambitious targets for the sector (320 GW of solar capacity by 2025, then 600 GW by 2030). Moreover, the revision of the Renewable Energy Directive (RED), sets out an indicative target for deploying innovative renewable energy technology of at least 5% of newly installed renewable energy capacity between now and 2030 to promote the production and use of renewable energy from innovative renewable energy technologies and safeguard Union's industrial competitiveness.

To achieve these objectives, it is necessary to address several challenges:

- Considering issues relating to access to land, conflicts of use over available land and soil artificialization.
- Developing synergies between renewable solar energy production and other economic, industrial, or agricultural activities, to promote project acceptability and create local value.

For this reason, agrivoltaics (agriPV) offers a significant potential for increasing solar energy production while enabling synergies with the agricultural world. Its development requires a multifaceted approach combining financial support, technological innovation, specialized training and regulatory adaptation. Maintaining a cross-departmental dialogue, specifically with DG AGRI, DG ENVI, DG CLIMA, DG MARE will be critical.

Agri-PV can be beneficial to rural economies, by creating jobs, generating community income, and tax revenues, and by providing diverse income revenues to farmers and landowners. Agri-PV installations also benefit the environment: they can protect crops from severe weather events such as droughts, direct sunlight, and hail. Agri-PV solutions can also improve water efficiency i.e., reduce water usage for irrigation purposes due to lower evapotranspiration, reuse rainwater where rainwater collection systems are installed, and more. Indeed, it's not uncommon for agriPV installations to help restore the agronomic potential of an agricultural plot.

Create an appropriate regulatory framework.

- To ensure a sustainable growth of the agriculture and solar sectors, while considering local and environmental aspects, Member States should be encouraged to develop comprehensive and coherent agrisolar policy frameworks.
- In order to avoid the emergence of heterogeneous regulatory definitions of agriPV within each Member State, we recommend introducing a common definition (while avoiding any unnecessary complexity) , that can be inspired by the French example, including in particular, criteria relating to (i) improvement of the potential of the agricultural plot concerned (ii) adaptation to climate change (iii) protection against hazards and (iv) improvement of animal welfare.
- Finally, landscape and environmental impacts of agriPV should be part of the policy framework.

Encourage scaling-up.

- While the launch of pilot projects across Europe has enabled us to collect data to demonstrate the economic and environmental viability of agrivoltaics, we now need to support its scaling-up. Agrivoltaics must no longer be seen simply as an innovative solution, but as a market technology.

- To achieve this, we recommend requesting Member States to recognize and support the deployment of agriPV as part of their National Energy and Climate Plans (NECPs) as well as in the renewable acceleration areas (RAAs). This would give Member States but also local players and developers a great visibility and positive signals. It could also enable developers and grid operators to better anticipate the grid challenges related to the connection of these projects, which are often located far from the grid.
- From an economic standpoint, agriPV could be considered as a technology that helps to increase the resilience of the agricultural sector by (i) developing projects that enable crops to better cope with climatic hazards and the consequences of climate change (ii) enabling this energy-intensive industry to stabilize prices and control its energy supplies. For this reason, Member States shall utilise existing EU fundings (R&D, Resilience and Recovery Fund) for the development of innovative forms of solar energy, including agri-PV, as it has been done in Italy for instance.

Protect farmers and developers.

- In some countries, technical and economic benefits of agri-PV projects are not sufficiently known, leading to strong resistance of the population. It is therefore recommended that the European Commission develops guidelines on how to improve private stakeholder engagement on agri-PV technology as well as facilitate knowledge sharing across wider public on the agri-PV overall benefits.
- To facilitate this acceptability and improve the visibility of the entire value chain, Member States shall promote the consideration and deployment of agri-PV projects within the Common Agricultural Policy (CAP), in cooperation with DG AGRI. They should also ensure clear guidance on CAP direct payments and its eligibility for farmers deploying agri-PV projects is crucial as it can incentivize the farming sector to develop agri-PV installations on their land.

Integrate training and skills

- We encourage the organization of training programs for farmers and solar energy professionals on best practices in agrivoltaics, including optimal management of crops under solar panels.
- Member States should provide the necessary capacity for training relevant authorities on how to handle and provide permits for the agri-PV projects. Technical support and capacity building initiatives are needed to ensure regional and municipal authorities can process project authorizations. This will in turn speed up and simplify the permitting process.