

Dedicated tenders boost agrivoltaics in France

Agrivoltaics | With France's rooftop and ground-mount solar tenders featuring a sub-family for agrivoltaics, Xavier Daval of France Agrivoltaïsme details routes to market for new projects.



Credit: Sun'Agri.

Despite being the largest country in Europe, France is fully booked when it comes to PV projects and scarcity of land has led to an exponential rise in the price of compatible land. But the so-called compatibility is a tax-based administrative zoning where 52% of the country is farmland, 39% is natural and only the remaining 9% of artificial land is free from constraints for PV development. It is easy to understand that artificial areas, most of the time, are assigned to a primary function such as hosting a building or road.

For many years solar developers have been eyeing up agricultural land, especially when such terrain is no longer cultivated. But urban development code and energy code impose rather strict conditions for construction on farmland. This is where agrivoltaics comes on board.

Well aware of the risks that poor quality PV projects on farmland would represent for the industry, a small group of entrepreneurs decided to join forces to create France Agrivoltaïsme, a dedicated business association solely focused on the topic. By acting as a lobby and being joined by FNSEA, the leading agricultural union, the association has strongly contributed to providing this new technology with a legal framework.

The new bill for the acceleration of renewables, proposed by the French

government, was too good an opportunity to introduce an official definition of agrivoltaics: agrivoltaic systems contribute directly to the establishment, maintenance or development of agricultural production. Such a system provides at least one of the following services directly to the agricultural parcel: improvement of potential and agronomic impact, adaptation to climate change, protection from hazards and improvement of animal welfare.

A lot of technical solutions are compliant with the above definition. Raised fixed structures can provide shade, vertical systems can improve grass growth, moving panels can cover trees or plants, deflecting rainwater or acting like a cover to displace the frozen point of the ground, dynamic systems can "listen" to plant's needs to control the quantity of light or the evapotranspiration of plants.

Of course such new projects have to be financed, and by nature, lenders are rather averse to novelty or risks. But what is an agrivoltaic system but a standard PV plant with a few extra parameters which are easy to frame? With the support of experienced advisors, the projects are rather straightforward to finance as their constraints are largely balanced by their benefits. To name a few, the most demanding crops are the ones impacted by the highest solar yield and the hybridisation of food and energy

Grapes being harvested at an agrivoltaics site in France.

makes high-grade ESG assets.

France's first agrivoltaic projects were developed under the umbrella of innovation, with public tenders providing a format to the technology (prior to a legal definition) and establishing first elements of economics (capex-opex). Today, the pioneers of the topic have already a handful of projects built and connected, providing tangible proofs of concept to the banks. New projects no longer need the innovation tender to exist, and both rooftop and ground-mount tenders are now extended with a dedicated sub-family for agrivoltaic projects.

So what are the best route to market options for agrivoltaics? France is still a very centralised country where the ministries want to maintain some control of the energy sector. Therefore, a lot of projects will privilege the contracts for difference auction schemes. But the energy crisis has triggered the awareness of both business and domestic consumers, and the willingness of participating in energy independence, even at a limited level, is growing. To do so, some people are investigating solutions around own-consumption or starting to discuss corporate power purchase agreements. The optimum solution is still not set as the crisis is blurring all provisions of future prices.

The coming year is also the one where France will be voting on its next energy roadmap (PPE), forecasting targets, per energy sources for the next five and 10 years. We at France Agrivoltaïsme are confident that regardless of the results of the discussions, agrivoltaics, because it provides a positive answer to both food and energy challenges, will take the lion's share of the solar market. ■

Author

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