



AGRIVOLTAICS IN FRANCE and GERMANY

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France: Regulatory framework applicable to agrivoltaic projects

Part 1 – General definition criteria

Law no. 2023-175 dated 10 March 2023 related to the acceleration of renewable energies production

- **General definition:** electricity production facility using the sun's radiative energy, whose modules are located on an agricultural plot where they make a sustainable contribution to the establishment, maintenance or development of agricultural production
- **Criteria:** at least one of the following services to be provided directly to the agricultural parcel, guaranteeing **significant agricultural production and a sustainable income for farmers:**
 - (i) improving agronomic potential and impact,
 - (ii) adapting to climate change,
 - (iii) protecting against hazards,
 - (iv) improving animal welfare
- **Exclusion criteria:**
 - impairs substantially (1) or to a limited extent (2) the services mentioned above,
 - does not allow agricultural production to be the main activity on the farm plot,
 - is not reversible

Agreement SER / FNSEA dated 23 March 2023

- dual objective of food sovereignty and energy independence
- agriculture's contribution to renewable energy production: 20% in 2020, can be doubled by 2030 or tripled by 2050 (ADEME)
- around 90,000 projects on hold (FNSEA)

Decree to come

- notably to specify the services mentioned above, define the **significant agricultural production and a sustainable income for farmers**, determine the conditions for deploying and supervising agrivoltaism and provide for the monitoring and control of facilities

France: Regulatory framework applicable to agrivoltaic projects

Part 2 – Key development aspects

Town planning constraints

- in agricultural zones, buildings and facilities **necessary for farming** or for community facilities may be authorised if (i) not incompatible with farming and (ii) do not compromise preservation of natural areas and landscapes
- since Law related to the acceleration of renewable energies production, agrivoltaic facilities are considered **necessary for farming** operations
- for non-agrivoltaic facilities, higher development constraints as a framework document will define the agricultural and forestry areas open to photovoltaic power generation projects

Environmental constraints

- the administrative authority may require agrivoltaic facilities to provide the financial guarantees needed to dismantle and restore the site
- agrivoltaic facilities and photovoltaic facilities installed on land in natural, agricultural and forestry areas are authorised for a limited period, subject to dismantling at the end of this period or at the end of operation of the facility if this occurs before the limited period
- characteristics of facilities must ensure that they are reversible

Support mechanism

- since Law related to the acceleration of renewable energies production, agrivoltaic facilities may be subject to specific calls for tender
- the presence of agrivoltaic facilities on agricultural land does not prevent the same land from being eligible for common agricultural policy aid
- photovoltaic installations less or equal to 500 kW are eligible to feed-in-tariff

Germany: Regulatory framework applicable to agrivoltaics

Part 1 – General requirements

Sec. 37 (1) no. 3 Renewable Energy Act (EEG 2023) and Determination of Federal Network Agency

- **General definition:** special PV plants complying with the criteria set out in the relevant Determination of the Federal Network Agency, and
 - (i) on **arable land** other than peatland, with simultaneous **crop cultivation** ,
 - (ii) on land other than peatland, with simultaneous cultivation of **permanent or perennial crops**,
 - (iii) on grassland other than peatland, with simultaneous agricultural use as **permanent grassland**,
 - (iv) on **rehydrated peatland**.
- **Additional criteria set out in Determination of Federal Network Agency:**
 - Crop yield of at least 66% of a reference site without PV (expert report at commissioning and every 3 years)
 - Determination with criteria for grassland and peatland to be issued by 1 July 2023

Changes envisaged in PV Strategy, May 2023

Federal Ministry for Economic Affairs and Climate Action

- **Biodiversity PV** on farmland that is temporarily not cultivated
- **66% crop yield requirement:** proof and consequence of breach to be reviewed
- Easing of **planning law** and **permitting** requirements
- Review of **EEG remuneration** rules

Vision for PV in the year 2035

[...] Biodiversity solar farms that create new habitats for wildlife and plants are standard, as is agri-PV in agriculture. [...]

(PV Strategy, May 2023, p.8)

Germany: Regulatory framework applicable to agrivoltaics

Part 2 – Key development aspects

Planning and permitting

- **No general privilege** for agrivoltaics in undeveloped areas outside of development plan. Agrivoltaic plant may be admissible in an individual case, but uncertainty. Envisaged change for certain smaller PV, further privilege under discussion.
- A **planning procedure** will often be required. No right to a positive outcome.
- The **permitting procedure** differs by Federal State.
- An **environmental impact assessment** may be required, especially if not already done in planning procedure. In individual cases, a water law permit may be needed.

Support mechanism

- **Calls for tender:** agrivoltaic facilities compete with other PV plants. Max. value for open space PV: 7.37 Ct/kWh. Bonus of 1.2 Ct./kWh for clear height of 2.10m or more. – Both figures apply in 2023 (degression from 2024 onwards).
- Installations of max. 1 MW are entitled to **fixed value** (6 MW in case of citizens' projects) without tender: For agrivoltaics, 7 Ct/kWh in 2023.
- **Direct marketing** for installations > 100 kW, i.e. support by market premium.
- The presence of agrivoltaic facilities on agricultural land does not prevent the same land from being eligible for **common agricultural policy aid**, if usable farmland is reduced by max. 15 %

Other considerations

- Grid connection
- Tax considerations: real estate tax, inheritance tax

General contractual structuring

Overview

