

Economic resilience,
Environment

Background

The last few years have been marked by rising electricity prices and increasing energy demand. In a lot of European countries, guidelines have been put into place on photovoltaic production. With the dependence of dairy farms on electricity, the availability of building roof space and the economic profitability, more and more farms are considering the photovoltaic installation.

How does it work?

Photovoltaic technology converts sunlight into electricity. Solar Panels capture the radiation and produce direct current. This current can either be stored in batteries or passed through inverters, which transform it into alternating current. This current can then be introduced into the local electric grid.

The potential for solar power generation is inexhaustible, even if the amount of sunshine varies throughout the year. With optimized orientation, it is possible to produce around 140 kWh/m².

The power of rooftop building installations range from 9 to 250 kW and more.

Nowadays, the majority of working systems are selling their entire production. However, some self-consumption is possible, particularly for systems that consume a lot of energy during solar production (milking robot, milk processing, hay drying, etc.).



Investments

With photovoltaic systems, loans are taken out over 10 to 15 years, and from the first year, the sale of electricity brings profits.

The investment required also depends on the distance to the power grid.

Examples of investments (price for France) for an installation of :

- 36 kWp

Investment : €38,000 - €47 000

Connection to the grid : €1500 - €5000

- 100 kWp

Investment : €90,000 - €110 000

Connection to the grid : €5000 - €25,000



Build your project

To carry out a photovoltaic production project, it is essential to think about the objectives and possibilities:

- Self-consumption?
- Installation power?
- Choose the surfaces that can receive the panels according to the local framework guideline (e.g. roof)
- What capacity to invest?
- Which installer?
- Who provides maintenance?
- What legal status should I use (the farm or a specific company)?

Be careful, especially on these points

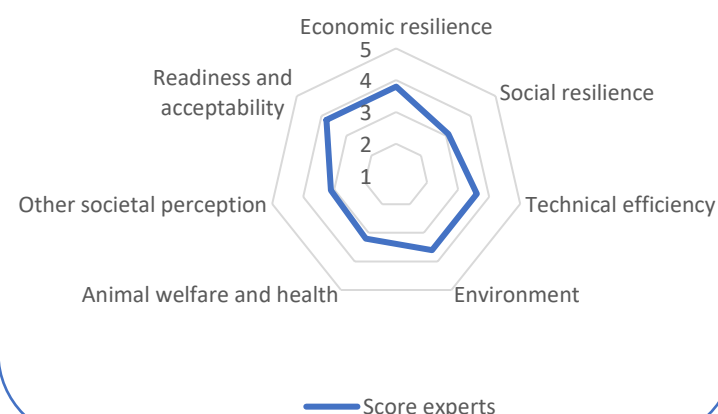
Research carefully in advance on the conditions and practiced sales prices to guide the sizing of the project

Specific advises

Don't hesitate to contact a range of suppliers and independent technical advisors to help you plan your project.

Local investment grants may be available: contact your local region or department for details.

Evaluation



Quote of the farmer :

« Once the investment and installation have been made, the maintenance is managed by a service provider: the installation generates a profit without me spending time on them. »