



3. RENEWABLE ENERGY PRODUCTION FROM OTHER RENEWABLE (NON-BIOLOGICAL) ENERGY SOURCES

CORRESPONDING MODULE 3

Introduction

The energy we use in France still comes mainly from fossil fuels and relatively little from renewables, but their share should double by 2030 thanks to the development of photovoltaic solar energy, wind power and renewable heat.

In France, conventional oil and gas deposits are limited and being depleted, coal mining is economically unprofitable and has been abandoned, there are no longer any active uranium mines, and shale gas exploitation has not been implemented following debates about its environmental impact.

France therefore imports 98.5% of its oil (Africa, former USSR countries, Middle East, North Sea), 98% of its natural gas (Norway, Netherlands, Algeria, Russia), all its coal (Australia, USA, South Africa, Colombia) and all its uranium (Australia, Canada, Gabon, Niger, Russia).

Our primary energy consumption is very high, and its reduction must be accelerated to allow renewables to increase their share.

Although renewable energies have been growing steadily for several years, they still accounted for only 19.1% of energy consumption in France in 2020. The target at that date was 23%, and was raised to 33% by 2030 by the 2019 Energy and Climate Act.

Source : <https://www.mtaterre.fr/dossiers/pourquoi-faut-il-developper-les-energies-renouvelables/energies-renouvelables-ou-en-est-la>

Description

It all began with Jules FALLOUX in 1900 who bought the Château de Passavant, after having made a fortune, with his two brothers, by uprooting and replanting part of the vineyards of Anjou and Saumur following the phylloxera crisis.

In 1993: François and Claire DAVID (brother and sister) took over the family business, becoming the 4th generation of descendants of Jules FALLOUX to occupy the estate.

In 1998: The Château de Passavant obtained the organic farming label

In 2007: The estate decided to transform their business by adopting biodynamic agriculture in both the vineyard and the cellar

The château de passavant is a wine-producing estate producing :

- Red wine from the " Anjou Village " appellation
- White wine from the "Côteau du Layon" appellation
- Sparkling wine with the appellation "Crémant de Loire

Since 2021 : The Château is diversifying its activities:

- A sheep farm with more than 50 ewes.
- Cereal crops
- Tree planting.



The owners of Château de Passavant aim to pass on to their heirs an environmentally friendly, profitable estate that can meet the needs of tomorrow's crisis.





DEPUIS 928
Château de Passavant



Advantages and challenges

"A well-maintained installation lasts about 40 years, but it requires remote monitoring and ongoing maintenance contracts," says Olivier LECOMTE (husband of Mrs Claire DAVID).

The Chateau de Passavant has had a 620 m² solar panel installation for over 12 years, producing 85 kWh. The electricity produced is resold.

What challenge did you face in installing photovoltaic panels on your farm?

In order to make a profit, the estate had to respond to these constraints:

- Provide an installation of sufficient size to cover the costs of maintenance and management of the installation.
- To be legally separated from the operation by a separate company.
- To integrate well in the evolution of the building, favouring the installation on new buildings.

What benefits have you gained from installing photovoltaic panels?

To date, the proceeds from the sale guarantee that the estate can cover the costs of maintaining the temperature of the vats and own a fleet of electric vehicles

The future of the farm?

The owners have plans to :

- To consider the thermal insulation of storage buildings.
- To monitor the agri-voltaic industry thanks to the "intelligent" panels
- To install a low capacity wind turbine on the site of the old mill.

"The challenge is to be able to cope with years of falling production, competition from organic products due to increased volumes and a sustained investment dynamic," concludes Olivier LECOMTE.

Main data

Created in 1900
Organic since 1998
10 employees
55 ha under vine
620 m² of solar panels 85 kw

Further
Information
Website

<https://passavant.net/>



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