

# Solar roofs on schools



Create a territorial dynamic by the participation of all



# The first citizen project in Normandy







#### What's a citizen project?

A collective renewable energy production project, carried, controlled and financed by citizens and/or communities.





# Citizen energy in France



In 2014 : first citizen wind farm of Béganne (Brittany)

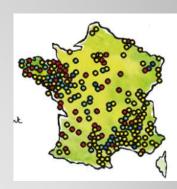
4 wind turbines of 2 MW Investment : 2 millions €



In 2020 : Cinergie ABBEI (Normandy) :

1 photovoltaic solar installation on the roof of a company

Investment: 52 700 €



Today, ∼ 100 projects

### **Solar PV Plaine Sud Energies**

In 2012, 3 solar photovoltaic installations.







**School in Bourguébus** 

247 m<sup>2</sup> - 108 000 € Production in 2019 : 39 930 KWh/an School in Le Castelet (St Aignan-de-Cramesnil) 160 m<sup>2</sup> - 63 000 € Production in 2019 : 26 872 KWh/an School in Le Castelet (Garcelles-Secqueville)

100 m<sup>2</sup> - 45 200 €

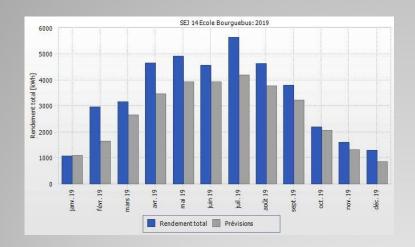
Production in 2019:

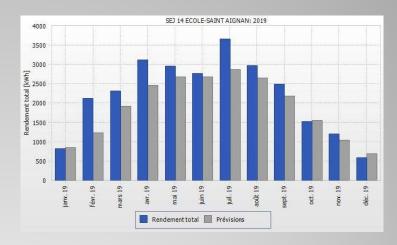
15 368 KWh/an

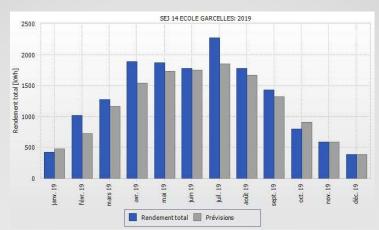
### **Project steps**

- Emergence (2010)
- Diagnostic (end of 2010 may 2011)
- Development (june 2011-june 2012)
- Construction (second semester 2012)
- Exploitation

# **Electricity production - 2019**

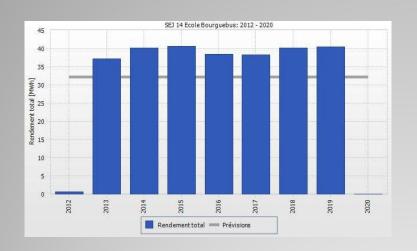


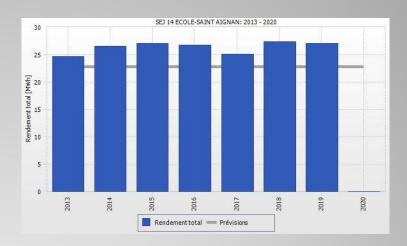


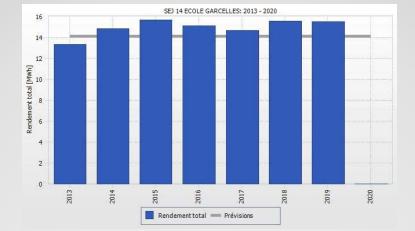


Unit: KWh

#### **Production evolution**







Unit: MWh

### **Funding for the project**

Capital funds and quasi-equity instruments

Shares of the cooperative (25 000 €)

Partners' current accounts of Energie Partagée\* (40 000 €)

- Grants from the Regional Council and Ademe (21 500 €)
- Bank loans (la Nef, a cooperativ bank)



# Other community supports

- Engineering support
- Support for local animation
- Bank guarantees

## Impact on the local economy

The citizen projects are 2 to 3 times more profitable than private projects.



Energie partagée study, with the support of Ademe

# A school project











