Key figures

Location: Fourmies, France.
Size: 98 kWp / 36 kWp / 67 kWp.
Annual energy production: 92 MWh / 30 MWh / 62 MWh.
Energy use: direct injection / collective self-consumption.
Technology: Monocrystalline PV modules; central inverter / micro inverters.

Attention points

The involvement of citizens from the beginning on created confidence and awareness in the community about the potential of renewable energy.
The result of the votes (hundreds of participants) were:

- Aragon and Mendes schools: "Aurore sur la ville",
- Gymnasium Léo Lagrange "Léo Solis",
- Gynmasium Marie-josé Pérec "Sport & Sun".

This resulted also in 2 successful crowd-lending campaigns with enthusiastic participation by 150 citizens.

Via the pilot project the community, private actors and social landlords now recognise there is a big solar potential if we think about collective and individual roofs.

Fourmies has also shared its experience with other cities of Haut-de-France through a conference dedicate to collective self-consumption and through study travels in the city.

Contact

City of Fourmies, France
Mickaël HIRAUX, mayor of Fourmies
Marie HENNERON, "Third Industrial Revolution Project" director (a resilient project based on the energy, ecology and digital transition)
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Useful links

Fourmies has created a video to show you the 3 PV pilot sites and describe the system of collective self-consumption and the crowdlending approach.
https://www.youtube.com/watch?v=ODKoUW3oDww

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2 Seas Mers Zeeën SOLARISE

European Regional Development Fund

Fourmies Solar energy on public buildings

Low-Carbon technologies

www.interregsolarise.eu

TOTAL PROJECT BUDGET:
4,18 M €
INCLUDING AN ERDF BUDGET OF:
2,51 M €

Budget

€ 262,000 of total partner budget € 419,000.

Goal

As part of the Third Industrial Revolution trend the City of Fourmies has installed nearly 1,000 m^2 of photovoltaic panels on public buildings (2 schools and two sports centres). A crowd-lending operation co-financed the investment. The business model of collective self-consumption is tested in this project.

Description

Collective self-consumption: the concept

The collective self-consumption allows one or more producers and or one or more consumers to organise collectively the consumption of generated energy. All actors need to be geographically close (2 km max.) and their consumption profile needs to be the same as the production profil of the PV plant. Concretly, a PV plant produce energy, this energy is self-consumed in real time by the building that supports the PV plant and the extra production is deduced from the bills of other buildings thanks to a data management system.

Citizens' investment: crowd-lending

Next to the European subsidy of 60 %, Fourmies has chosen to finance the other part via a crowd-lending scheme, so its citizens can contribute to the financing of its energy transition and enjoy the economic and environmental benefits of these installations. This operation is structured as a four-year loan, consistent with the overall financing scheme for the installation (grants + loan). The town of Fourmies will reimbursing the lenders, with a yearly interest of 1.87 %.

The residents were honored by voting for the names of the future facilities of the pilot projects during the construction phase.

Pilot 1: ARAGON & Mendès France Schools

This pilot is installed on the roofs of two schools refurbished for this purpose. The energy production from the 98 kWp system is injected directly into the electrical distribution network and sold to an electricity supplier.

Pilot 2 and 3: The Sports Complexes: Léo Lagrange Gymnasium and Marie-José Pérec Gymnasium

The production of the two systems, together 103 kWp, is shared with eight municipal buildings, in a scheme called collective self-consumption.