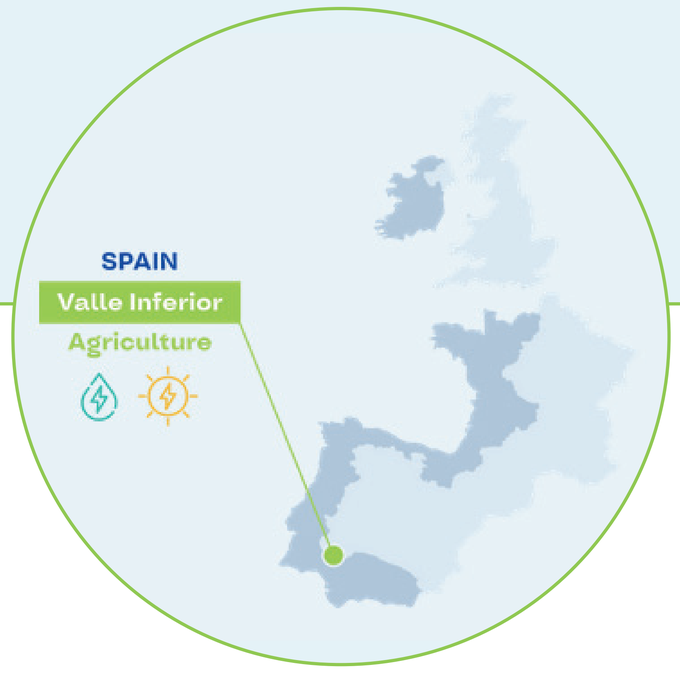
Interreg Atlantic Area
HY4RES

Co-funded by the European Union

AGRICULTURE PILOT SITE

Valle Inferior, Spain



GENERAL INFORMATION

VI irrigation system - **18,945 ha** - **2300 irrigators** - **300 plots**
Las Catalinas farm - **200 ha**

Main crops: sweet potatoes, carrots & peaches

Construction in **January 2025**
Operations started in **May 2025**

Increasing the use of RE sources in the community
Minimizing the use of fossil fuels
A more sustainable & resilient agricultural system



TYPES OF RENEWABLE ENERGY

Solar energy

40 solar panels
24.8 kWp

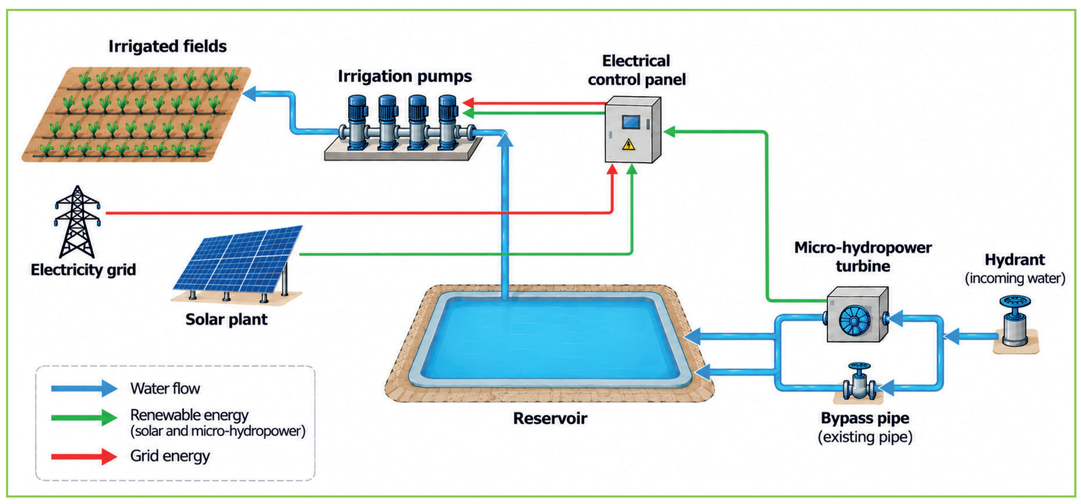
Hydropower

Pump-as-turbine
6 kW

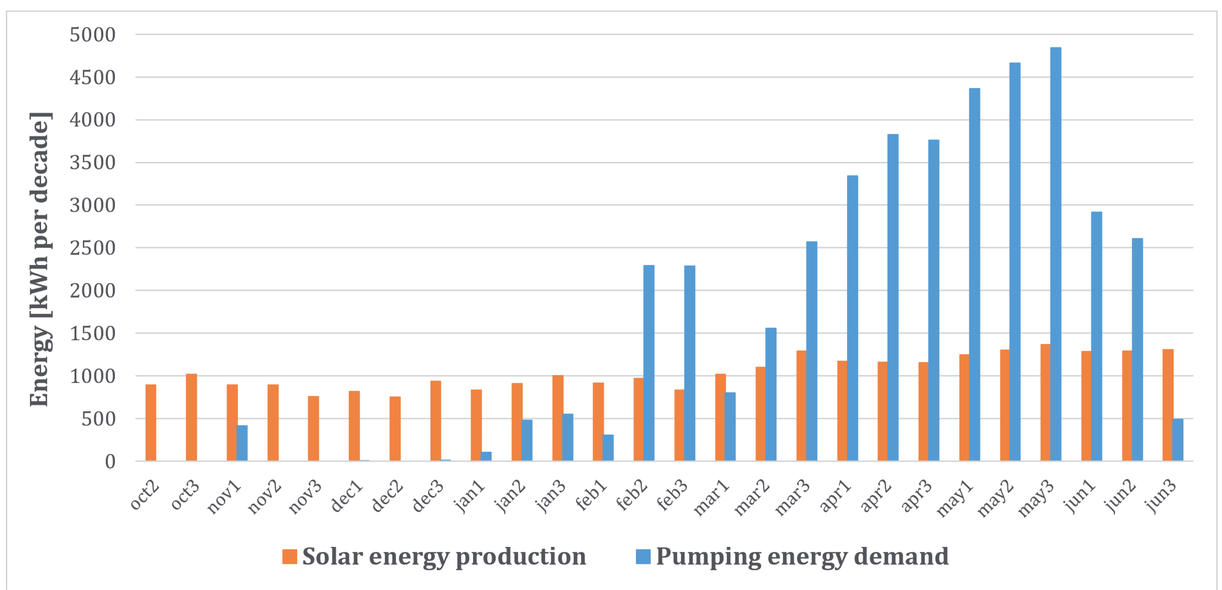
Water reservoir
13,000m³

Turbine-generator capacity
9.2 kW

Hydrant
8-inch



SOLAR ENERGY PRODUCTION



Estimates based on **historical data** for the irrigation season (October to June), not actual measurements from the pilot plant.

TECHNOLOGIES/TOOLS USED

Management software

Forecasting model

Smart sensors and AI

INVESTMENT & ROI

Cost
€50.000

Theoretical energy price
€0,12/kWh

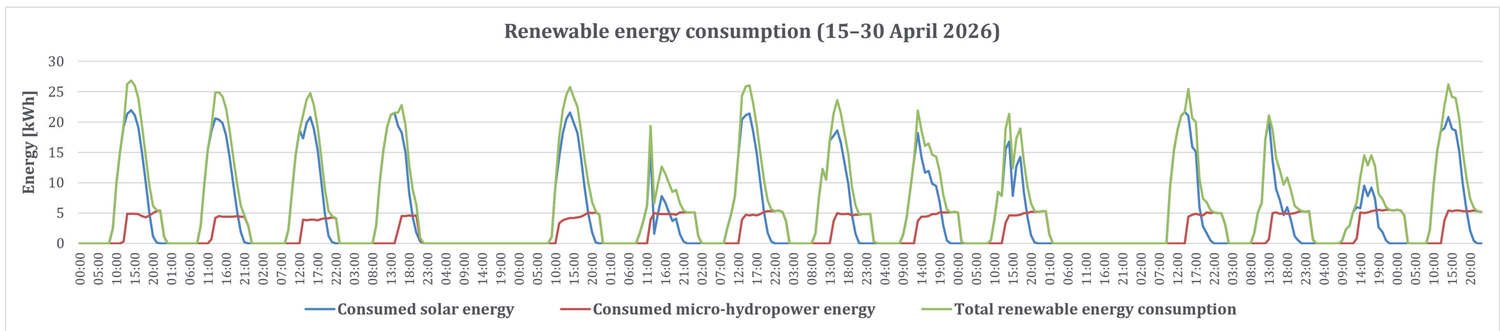
Annual saving
€5.850

Total annual production
49.300 kWh

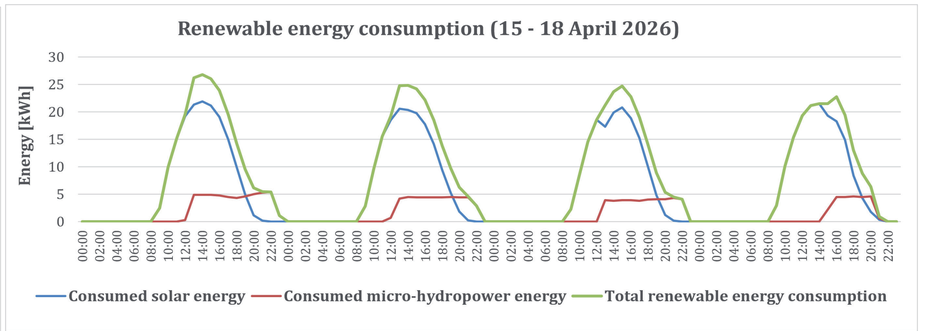
ROI in 8 to 9 years

RENEWABLE ENERGY USE

Solar and **micro-hydropower** use and total renewable energy consumption



Renewable energy use **over 16 days**
April 2026



Renewable energy use **over 4 days**
April 2026 (detailed view)