

PROJECT SUMMARY SHEET



**RENEWABLE
ENERGIES**

ALPGRIDS

Increasing Renewable Energy
Systems uptake through
Microgrids in the Alps

THE PROJECT IN BRIEF



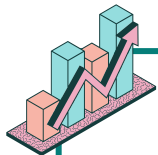
TOTAL BUDGET

€1,881,778 (of which €1,599,511 ERDF), divided between 12 European partners from 5 different countries (France, Austria, Germany, Italy and Slovenia)

DURATION



From october 2019
to august 2022



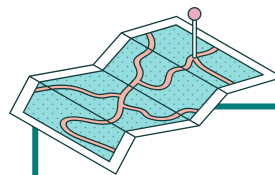
OBJECTIVES IN THE REGION

- Develop technical-contractual and economic models for collective self-consumption involving communities
- Facilitate the massification of this model in the Auvergne-Rhône-Alpes region



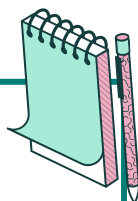
TARGETS

Local and regional authorities, citizen energy communities, energy agencies, network operators, energy service companies.



ACTORS INVOLVED IN AUVERGNE-RHÔNE-ALPES

- Territoire d'énergie Drôme - SDED, co-financing the project
- CNR, project partner
- Six pilot territories (communes of Die, La Chapelle-en-Vercors, La Roche-de-Glun, Montélier, Saint-Marcel-les-Valence and Communauté de communes du Val de Drôme) and associated local partners: DWATTS, Centrales Villageoises VercorSoleil
- Panel of actors involved in the regional committee: Auvergne-Rhône-Alpes Region, SYDER, ENEDIS, AURA-DS, ACOPREV, SDE 07, Urban Solar Energy, Régie d'électricité de Thônes



ACTIVITIES

- Study of six pilot sites in the Drôme area
- Construction of contractual and technical solutions and business models
- Proposal for supportive measures for public policies
- Scaling up in other territories: drafting of a guide and final conference in the region

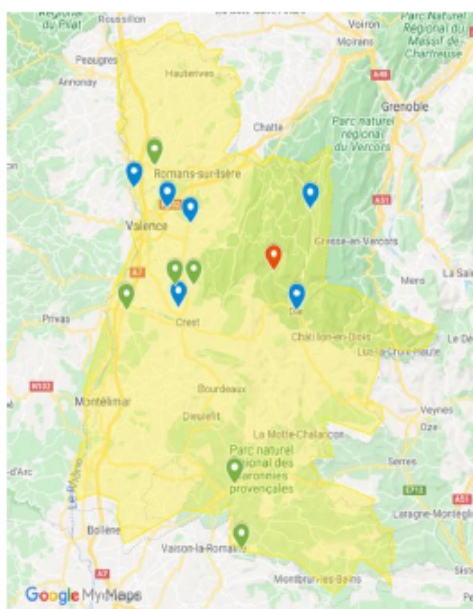
ACTIVITIES CARRIED OUT



STUDY OF SIX PILOT SITES IN THE DRÔME



- **Collection of consumption data** from public buildings
- **Sizing of collective self-consumption projects** with the TECSOL design office
- **Business planning**



Alpgrids pilots in the Drôme Area



Saint-Julien-en-Quint
(CNR)



6 pilot sites where a
collective self-
consumption project will
be designed in ALPGRIDS



Associated municipalities
interested by the issue
and might benefit from
the results to develop
their own project



BUILDING CONTRACTUAL AND LEGAL SOLUTIONS AND AN ECONOMIC MODEL FOR COLLECTIVE SELF- CONSUMPTION



- Commissioning of a legal study from De Gaulle Florence et associés: Legal contractualisation of collective self-consumption photovoltaic projects.
- Identification of favourable criteria to the implementation and replication of collective self-consumption projects with local authorities: typology of consumer buildings, level of valuation of the electricity produced, size of the production facilities, etc.



TESTING OF THE DEVELOPED COLLECTIVE SELF-CONSUMPTION MODEL AND FEEDBACK



AT THE EUROPEAN LEVEL

Publication of a guide for public authorities in the Alpine Space, presenting proposals for measures to facilitate the implementation of microgrids in the territories. The main recommendations are :

- ◆ Map the actors concerned by energy and set up a steering committee, bringing together the various stakeholders.
- ◆ Identify policy barriers and opportunities at regional, national and European level and make recommendations for legislative change and for contributing to a favourable policy framework for collective self-consumption.
- ◆ Revise local energy plans (SECAP...) to include measures for local energy communities.

In order to contribute to a favourable policy framework for local energy communities at the European level, a roundtable around ALPGRIDS entitled "A win for all in the energy transition" was held on 17 November 2021 in the framework of the 5th SUERA Energy Conference. This event attracted a wide participation of different stakeholders who contributed to the debate on the identified barriers and recommendations.

AT THE REGIONAL LEVEL

Publication of a guide for French local authorities and energy communities presenting the key points for a successful collective self-consumption photovoltaic project:

- ◆ Definitions (geographical scope, contractual relations between producers and consumers, production distribution key, etc.).
- ◆ Economic models (impact on bills for consumers and economic viability for producers) for a community.
- ◆ typology of buildings suitable for an operation.
- ◆ Legal models with and without third-party investment.

A final conference was held on 23 June 2022 in Valence (Drôme) to present the model developed and share the main results of the pilot sites with the over-one-hundred stakeholders present:

- ◆ The 6 pilots are villages that often have a high concentration of buildings within a radius of less than 1 km from their centre.
- ◆ A self-generation rate (share of consumption substituted by solar energy) of 27% on average on the 6 sites.
- ◆ An average self-consumption rate of 81% on the 6 sites.
 - The rest is fed into the grid and can benefit from a feed-in tariff (moderate risk of losing buyers)
- ◆ Some uses are particularly suited to self-consumption:
 - Pumped energy transfer stations, retirement homes, town halls, swimming pools, campsites, etc.;
 - Activation of load curves required.
- ◆ The share of supply represents on average 39% of the 2021 invoices excluding VAT, a proportion that has almost doubled in 2022.
- ◆ In the case of individual self-consumption, solar energy replaces all the components of the bill for the building concerned.



Conference "Collective self-consumption and microgrids in Drôme" presenting the results of the ALPGRIDS project in the region - copyright AURA-EE

RESOURCES PRODUCED



Video: Discovering ALPGRIDS

Introduction to microgrids and local energy communities, and how ALPGRIDS fosters their uptake in the Alps.



Alpine Microgrid Model

Practical guide to promote a common Microgrid model for the Alpine Space region based on experience from 7 Microgrid pilots implemented within ALPGRIDS.



Microgrid Policy Package

A guide to help design and implement political strategies for the effective development of Local Energy Communities.



ALPGRIDS policy roundtable: “Local Energy Communities: «A Win for All in the Energy Transition»

Minutes from the European conference held on 17 November 2021 in the framework of the 5th SUERA Energy Conference.

RESULTS AND LESSONS LEARNED

Thanks to the project, the consumption of public buildings in the six pilots has been collected and analysed, and photovoltaic production projects to supply local microgrids have been sized accordingly.

The technical and contractual conditions for the implementation of collective self-consumption projects have been well identified and the work carried out with the local authorities has facilitated their understanding of the economic models.

The project has therefore enabled the contractual and legal framework of collective self-consumption to be cleared for the implementation of projects involving public buildings. Model contracts were drawn up by the law firm De Gaulle Fleurance et Associés.

More generally, several hundred regional actors have had access, via the numerous workshops and interventions carried out within the framework of the project, to the knowledge currently available on collective self-consumption.

Finally, proposals for measures to support collective self-consumption were identified and communicated to regional and national bodies.

FUTURE PROSPECTS

As a follow-up to ALPGRIDS, the pilot sites continued to make progress on the operational implementation of the projects studied.

The standard contracts drawn up within the framework of the project are regularly used by local authorities that request AURA-EE to carry out collective self-consumption projects.

The support measures proposed in ALPGRIDS are currently being included in the French Renewable Energy Acceleration Bill.

TO FIND OUT MORE

- The ALPGRIDS project website: alpine-space.eu/project/alpgrids/
- The ALPGRIDS project page (in French): auvergnerhonealpes-ee.fr/projets/projet/alpgrids

CONTACTS IN AUVERGNE- RHÔNE-ALPES

Noémie Poize – Renewable Energy Manager
noemie.poize@auvergnerhonealpes-ee.fr

Patrick Biard – Europe and International Affairs Director
patrick.biard@auvergnerhonealpes-ee.fr

Noémie Bichon – European Project Officer
noemie.bichon@auvergnerhonealpes-ee.fr

Noémie Zambeaux - Networks Officer
noemie.zambeaux@auvergnerhonealpes-ee.fr



**Auvergne
Rhône-Alpes**
Énergie Environnement