

Interreg Alpine Space



ALPGRIDS

EUROPEAN REGIONAL DEVELOPMENT FUND

Newsletter #3

June 2021

Increasing RES uptake through Microgrids in the Alps

IN THIS EDITION

Dear Reader,

Welcome to the third edition of the ALPGRIDS Newsletter. At a time when Europe has decided to increase its climate objectives through the European climate law, the acceleration of the energy transition and the deployment of renewables relies to a large extent on the implementation of innovative governance models within the territories supported by advanced energy systems. Microgrid solutions can support the establishment of local energy communities.

In these pages, we would like to highlight some achievements of our project partners despite the impact of the COVID-19 crisis and share our activities undertaken over the last six months.

All ALPGRIDS newsletters contribute to the commitment towards a more sustainable and carbon neutral Alpine region and we hope that you find them just as interesting as we do.

Follow us on the website www.alpine-space.eu/projects/alpgrids which is also a great source of information of news, updates and project progress on key outputs.

We hope you enjoy learning more about ALPGRIDS!

- ALPGRIDS first interactive document
- Activities in pilot areas
- ALPGRIDS Open call
- Sounding Board establishment
- RES directive: road to 2050
- ALPGRIDS news & events
- Partners & Contacts

ALPGRIDS AT A GLANCE

The general objective is to create a transnational enabling environment to foster microgrid solutions supporting in particular the creation of local energy communities.

DURATION:
01/10/2019–30/6/2022

ERDF: €1,599,511



LOW CARBON

Read more about ALPGRIDS at:

www.alpine-space.eu/projects/alpgrids



source: energies partagees

ALPGRIDS first interactive document

ALPGRIDS partners have released an interactive document “Alpine Microgrid Model”. Take a look and learn more about microgrids and their benefits, solutions, Energy Communities, project pilots and their strategic objectives, plans and expected outcomes.

You can access it on the ALPGRIDS website <https://www.alpine-space.eu/projects/alpgrids/en/home>.



We continue with the activities in pilot areas

ALPGRIDS is focusing on creating a transnational enabling environment to foster microgrid solutions supporting in particular the creation of local energy communities. To achieve this, the project is building on seven microgrid pilots in five countries. You'll find out below our pilots' updates and recent activities

Municipality of Udine (Italy)

The pilot was reconfigured to take into consideration two renewable energy communities: the first related to four social buildings and the second one including primary school, kindergarten and museum. In doing so, both the two possible ways of collective self-consumption defined by the existing regulation will be tested. The monitoring of thermal and electrical consumption will continue to take into consideration the summer season for the optimal sizing of local generation sources.

Municipality of Selnica ob Dravi (Slovenia)

At the pilot location in Selnica ob Dravi, an inspection was carried out in March to set up a solar power plant at the fire station. Collected monitoring data is being analysed and several technical variants are being prepared for the establishment of an individual self-sufficient PV plant or the establishment of a self-sufficiency community. We are working on the legal framework basis necessary for energy Community implementation.

St Julien and Val de Quint (France)

The developments of the numerical modelling of the components involved in the Val de Quint microgrid project have been completed. These include physical assets, as flexible load consumption, but also economic modules like consumer's billing or specific self-consumption grid access fees. The project's topology has been set up and the validation of the global numerical tool is about to be validated on test cases. The estimation of the consumer's load data is now completed while the estimation of the production data (simulated and forecasted ones) is still in progress. Once these data are available, the numerical simulations of the Val de Quint microgrid shall begin.

Drôme (France)

The acquisition of data is now on-going for the six pilot sites in the Drôme department. It represents about 70 buildings. For some of them, setting up the access to the load profile datasets has been rather long and difficult and the implementation has been delayed. An engineering company was selected in April to start working on the design of a collective self-consumption scheme for each of the six pilot sites. The economic feasibility will also be studied in detail to assess the impact on the consumers' bill and on the producer's business plan.

City of Savona (Italy)

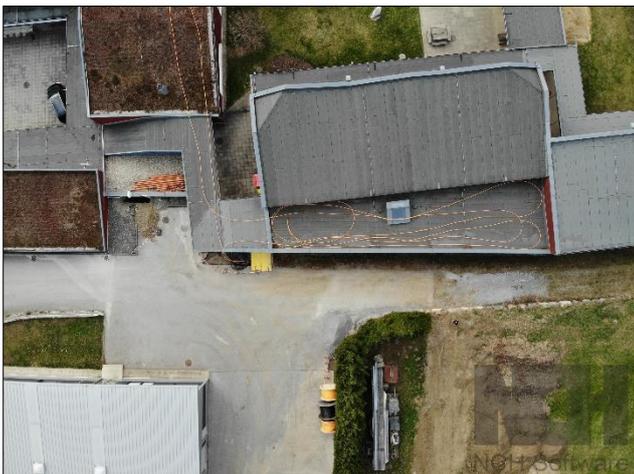
The work of the Savona pilot research team is presently focusing on the items described hereafter. The definition of the electrical network architecture for all the stand-alone buildings of the district and for those served by the two microgrids has been defined based on the previously done preliminary design phase. A classification of possible REC or CEC configurations has been performed based on the current Italian law and technical rules; applying the knowledge of the committed power for each user, various energy tariff models have been established including incentives for REC or CEC configurations. User daily load energy profiles are currently being developed based on: direct measurements on Savona campus polygeneration microgrid, real measured data derived from other studies for similar buildings, typical data available from software tools, real customer data available from DSO smart meters. The capital and maintenance costs of the RES as a function of the size of the plant have been set based on public price lists or by analysing the cost of installation for some plants recently installed at the Savona Campus. Finally, optimal planning studies have been initiated using the above-mentioned collection of data.

WEIZ Campus (Austria)

The pilot in Weiz was recently upgraded. A new Redox-Flow Battery 88kW / 233kWh has been installed and is scheduled to start operation soon. To enhance the generation capacity at the pilot site, an additional 20kWp of installed PV capacity will be installed at the WEIZ I building by June or July depending on the delivery date of the components.

Municipality of Thannhausen (Austria)

The pilot in Thannhausen has finally left the planning phase and entered the construction phase. Starting at the end of March, the Thannhausen Microgrid is slowly becoming reality. Currently the PV generation is being installed at the rooftop of the local recycling centre, the first power lines have been laid and the central intelligence to control the power flow is waiting to be deployed. The construction phase should be finished by May/June 2021, when the system will be tested and the operational phase will begin.



Building phase in Thannhausen



Savona pilot

ALPGRIDS Open Call closed on 31 May

The call for the identification of the ALPGRIDS Promoting Organisations closed on 31 May. Partners are now examining the proposals with the aim of identifying 12 organisations who will benefit from the bilateral exchange programme. The selected Promoting Organisations will have the opportunity to exchange experience and develop their understanding about microgrids and energy communities through joint exchanges with a project partner. In particular, candidates will benefit from:



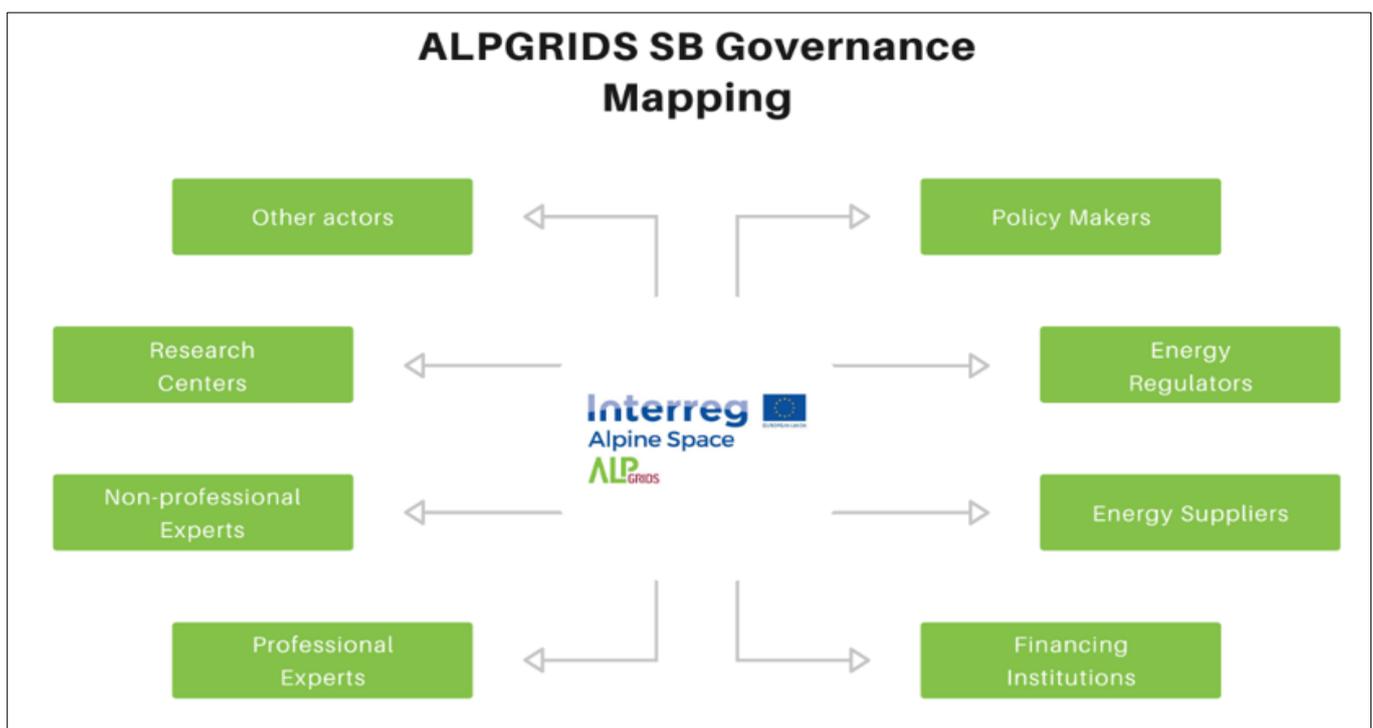
- an onsite visit to the ALPGRIDS partner's premises for two persons;
- onsite technical assistance from the ALPGRIDS partner experts;
- remote support.

The list of selected organisations will be communicated in July on the project website. Stay tuned!

ALPGRIDS Sounding Board establishment

The drivers shaping the emergence and success of microgrids include on the one hand the existing energy policies, the socio-economic factors and the individual project specificities. On the other hand, it relies on the actors' cohesion and designing and implementing the skills expressed by the microgrid stakeholders as a group. The inherent heterogeneity of an energy community involves clear differences in terms of members' individual motivations and engagement level.

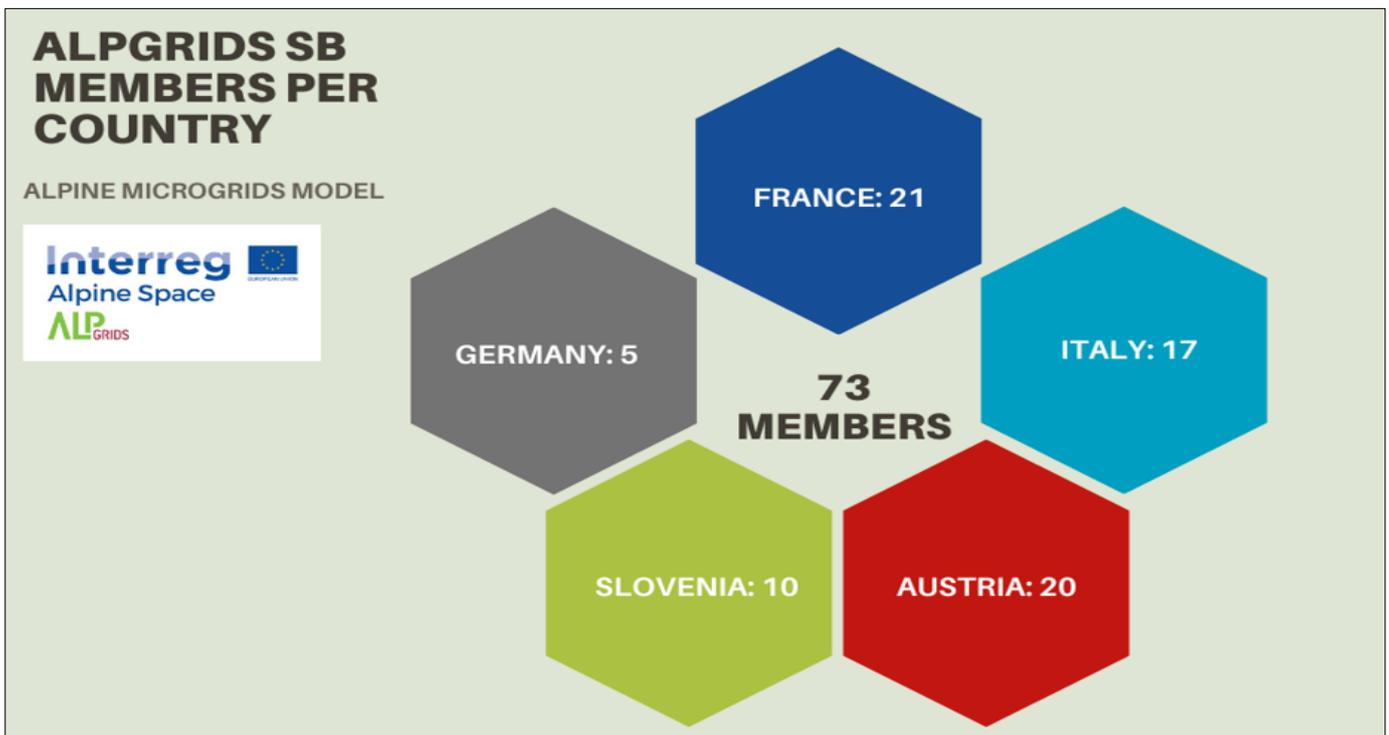
Stimulating the creation of a policy environment favourable to the development of microgrids and energy communities in the territories of the Alpine area is one of the main ALPGRIDS objectives. To this end, the project, right from the application phase, collected a large number of expressions of interest from policy makers, energy utility companies and regulators as official Observers supporting the project.



Aiming to consolidate and integrate its Observers group, ALPGRIDS initially focused on carrying out a mapping able to identify the energy relevant stakeholders at various levels.

Following a shared methodology for mapping new key-stakeholders, all the project partners identified additional national, regional or local energy actors in order to structure a project sounding board aiming at providing guidance about key policy deliverables.

The involvement of the new members was completed in March 2021. Currently the ALPGRIDS Sounding Board consists of 73 energy stakeholders, 36 of which are also Observers, and involves policymakers, energy regulators, energy suppliers, energy agencies, national governments and local authorities, financing institutions, professional and non-professional experts, research centres and other actors.



The working methodology provides that each partner builds a continuous and structured relationship with the Sounding Board members giving priority to those that best fit the project single issue to be addressed from time to time. Inputs and results are shared nationally and transnationally during dedicated seminars and meetings. Members are consulted through informal occasions as well, to collect opinions, additions and new ideas useful to support the project activities.

The extended and integrated ALPGRIDS Sounding Board is now able to best support the Partners in their analysis effort of the existing policy tools promoting microgrids and energy communities at local and national levels.

Renewable energy directive: road to 2050

A synthesis of **recommendations** formulated by Regions and Energy Agencies, compiled and communicated by **FEDARENE**



In order to accelerate the deployment of renewables, the European Commission launched a public **consultation** to revise the Renewable Energy Directive of 2018. Several **ALPGRIDS partners** who are part of the FEDARENE EU network have contributed to developing the 10 following recommendations. Detailed recommendations are available here (https://fedarene.org/wp-content/uploads/2021/05/RED-review_FEDARENE-Policy-recommendations.pdf)

Key Recommendations

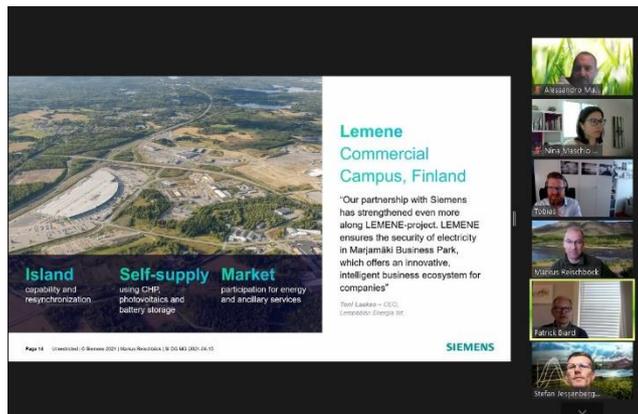
1. **Accelerated** use of RES through “regional facilitation services”
2. Binding EU and national targets of at least 40% renewable energy in the final energy consumption by 2030 (Article 3)
3. Information, training and facilitation focused on **market uptake** of RES (Articles 18, 21 & 22)
4. Greater focus on the **production** of on-site renewables as a territorial development strategy
5. Greater synergies with the EPBD to increase RES integration in buildings
6. Enhanced access to energy **data** for “regional energy observatories”
7. Accelerated mainstreaming of renewable energy in heating and cooling facilitated by local/regional energy agencies (Articles 23 & 24)
8. Production of **hydrogen** should be exclusively **local**, from renewable sources, and should not be used directly for decarbonising the building stock
9. Carbon neutrality as a KPI for businesses
10. Increased use of renewables in transport supported by **smart mobility** and non-transport solutions



ALPGRIDS News & Events

ALPGRIDS Project Meeting

On 9 and 10 February, project partners met online to review the progress of the project, in particular pilots and communication activities. All project partners were present. An exchange session was organised about pilot data sharing. See the topic brief [here](#).



ALPGRIDS Quarterly Coordination Meeting & Exchange Session

On 15 April, project partners had the opportunity to meet online and discuss with key market players in order to exchange information about the EU market perspectives for microgrid solutions. Representatives of, SCHNEIDER ELECTRIC and SIEMENS, shared their insights and experiences of the microgrid solution. Find out more about the exchanges [here](#).

City of Udine brings its pilot in the GSE national focus groups

On 27 April, the GSE (Italian public authority managing the national electrical services) invited the Municipality of Udine to the regional focus group to present the city's progress in the roadmap towards the establishment of the first Energy Community in the urban area – Udine's ALPGRIDS case study. The online webinar involved a group of 82 stakeholders. The energy manager of the City of Udine presented the achievements reached so far through the ALPGRIDS pilot: results from energy data processing by DeMEPA srl, Energy Community best configurations, investments optimising the pilot technical equipment and investment payback period.



W.E.I.Z and 4ER organised the stakeholder workshop of Thannhausen

The microgrid in Thannhausen is becoming reality. To ensure that the requirements of our stakeholders are met, W.E.I.Z. and 4ER conducted a stakeholder-workshop on 11 March with 15 participants. During the workshop we discussed the next steps in the construction of the microgrid and got the stakeholders feedback and thoughts on the process.



Partners & Contacts

- Auvergne-Rhône-Alpes Energy Environment Agency (AURA EE)
- Regional Agency for Infrastructure, Building Renovation and Energy of Liguria (IRE spa)
- Energy and Innovation Centre of Weiz (W.E.I.Z.)
- Energy Agency of Podravje – Institution for Sustainable Energy Use (ENERGAP)
- 4ward Energy Research Ltd. (4ER)
- Design and Management of Electrical Power Assets (DeMEPA)
- B.A.U.M. Consult GmbH München (BAUM)
- Rothmoser GmbH & Co. KG (ROTH)
- Compagnie Nationale du Rhône (CNR)
- Municipality of Udine (UDINE)
- Municipality of Selnica ob Dravi (SELNICA)
- University of Genoa (UNIGE)



LET'S STAY IN CONTACT!



<https://www.linkedin.com/groups/8910047/>

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This Newsletter provides information about the Interreg Alpine Space project ALPGRIDS as well as other information about news, events and initiatives in thematic areas covered by or connected with the project and the Alpine Space programme.

ALPGRIDS is co-financed by the European Regional Development Fund through the Interreg Alpine Space programme