



Off-grid: renewable energy DIY for rural development



Summary

The objective of the project has been to collect and explore appropriate renewable energy technology solutions and develop physical prototypes and an open license manual to promote decentralised renewable energy generation opportunities. The project involved the installation and demonstration of alternative technologies on selected farms and practical workshops in which experts trained an interested rural audience on self-making and installing technologies such as solar heat and PV panels and other related equipment capable of generating energy as a part of energy-active rural houses.

Why is it a case of energy citizenship?

The case was initiated and implemented by LEADER local action groups (LAGs). The case defines itself as “A platform & community for smart solutions & ways to live with energy, a space where we share research, knowledge & experiences to deepen our common understanding. We do it for all of us and for [...] nature.” The case has provided relevant activities to close the gap in competences and skills for utilising and installing renewable energy solutions.



DIRECT ENERGY
PRODUCTION /
CONSUMPTION



RURAL



INDIVIDUAL



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.



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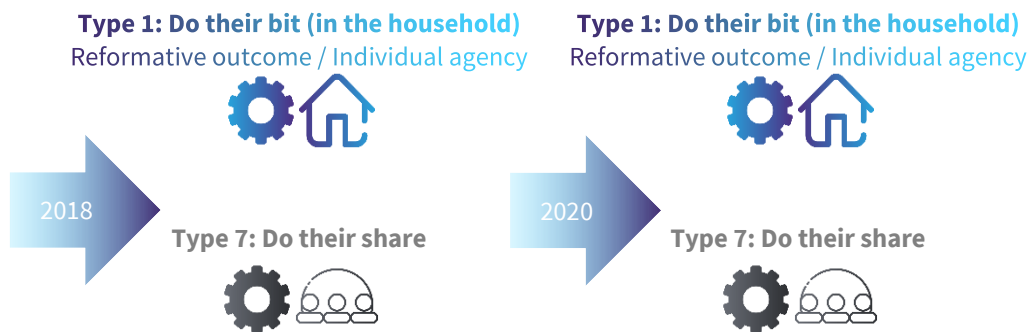
Goals



1. Collecting and further exploring appropriate renewable energy technology solutions;
2. Developing physical prototypes for decentralised renewable energy generation;
3. Establishing an online platform where ideas, solutions and activities connected to the topic are spread to a broader community.

The story and the typology

The Off-Grid DIY Renewable Energy for Rural Development project was initiated to connect actors in the Baltic Sea region and create a platform where ideas, solutions and activities connected to the field of energy could be spread to a broader community. But the project, which started in 2018, has a transformative and individual type of agency, with a secondary collective agency as private households and groups of households were invited to participate.



Case history summary

For the summary
methodology,
click [HERE!](#)



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Phase 1: EU funds through LEADER, 2018 - 2020

The first phase of the OffGrid project was funded by EU funds through LEADER local action groups (LAGs), including four LAGs from Latvia.

The project started in 2018 with an individual type of agency: private households and groups of households were invited to implement concrete, practical measures in individual households/farms for small-scale energy solutions and larger installations. An example of the latter is the Trians-S modular house using solar panels. In Latvia, activities have been implemented in three locations, one of which is in a Natura2000 territory, the natural park “Pape”.

The initial goals were reformative and, as such, have remained so. However, if an increase in skills and awareness in society regarding self-energy production in the long term can lead to systemic

Phase 2: Since 2020

Since 2020, activities have been maintained, and the installed energy equipment is currently in operation and practical use.

It is worth noting that the DIY idea in Latvia is not a new practice; it has a legacy in the country’s past when resources were scarce, and many things had to be invented, produced and/or created at home by individuals. This applies to homemade equipment for producing energy from RES (wind, water, sun) for individual use or as an amateur activity.

As an ENCI case, the project was stable; the ideal type did not change over time.

change and transformative innovation that increases energy independence, this could become a radical change.

The project was also initiated to connect actors in the Baltic Sea region, so it has a collective secondary ideal type.








	Individual			Collective	
					
 Reformative	1. Do their bit (in the household)	3. Do their bit (within organizations)	5. Make their voice heard	7. Do their share	9. Do the job
 Transformative	2. Do their own (in the household)	4. Do it their way (within organizations)	6. Make their vote count	8. Go ahead	10. Make their claims

Main type: Do their bit (in the household)

Reformative outcome / Private in the household agency

Secondary type: Do their share

Reformative outcome / Citizen-based and hybrid agency

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The aspects of energy citizenship

Members of the implementing organization (NGO, or LAG “Abulas Rural Partnership”, which is a collective decision-making mechanism according to its statutes), are involved in controlling the activities that are implemented by the organization. Democratically elected representatives vote when necessary. **This is a self-governance (bottom-up) case, thus the case exhibits quite strong elements of citizen control.**

Citizen power/control
Citizens can express their views, but their views are not necessarily taken into account



In public materials available about the case there are some references to sustainability and ecological limits. **The case involves activities designed to reduce carbon emissions by selecting alternative means of energy production.** This is mentioned (e.g., in the project poster, which refers to climate-related activities being significant for reducing CO₂ emissions).

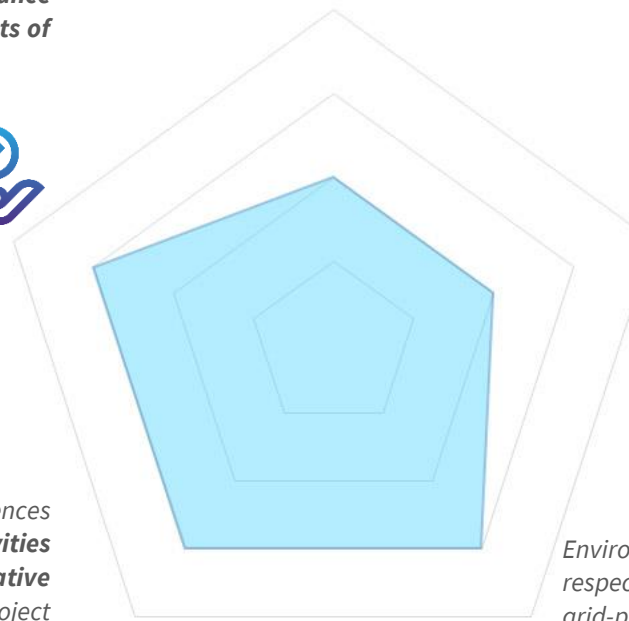
Carbon limit
Explicit recognition of the carbon limit



However, the main profile of the case has not been related to any decision-making mechanisms or participatory activities, **but the character of the project (supporting a decentralised energy system) does have a democratising effect.**



Democratic energy future
Energy democracy is considered as a positive value, but the vision does not really address it



The project was not targeted at addressing energy equity; it was about demonstrating individual opportunities and technologies for generating energy. This is a case of a nature-protection-territory pilot, but it involves applying a rather holistic approach to nature protection in general, emphasizing the need to identify sustainable solutions for nature management. However, it **indirectly moves equality issues forward.**



Equity and justice
Justice or equity are essentially out of scope or restricted to access to market

Environmental sustainability issues are mainly seen as self-evident in respect to the use of renewable energy sources as an alternative to grid-produced energy. **Energy independence (in terms of producing energy) is mainly addressed in this case.** Organized training seminars for Microenergy production actors about pedal energy included some brief information about sustainability issues.



Environmental sustainability
Environmental sustainability is part of the process, energy remains the main focus

Further information



facebook.com/OffgridDIY/
youtube.com/@offgriddiy9658



www.off-grid.rocks
www.abulas.lv/lv/projekti/starptautiskais-projekts-off-grid-diy



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- Interview with a case participant
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Source of images

www.abulas.lv/lv/aktualitates/346-starptautiskais-projekts-off-grid-starts



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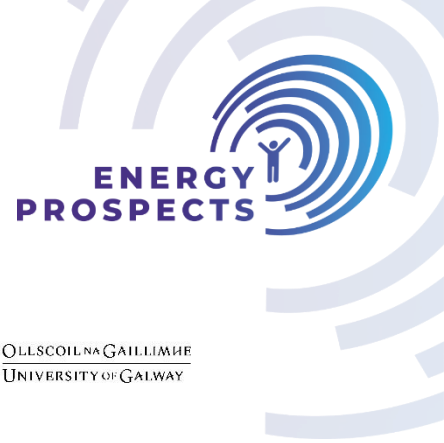
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