CASE STUDY

"Energy Community Myrmidones"

Farmers taking charge in the energy crisis.

(Greece)

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1 The social innovation

One of the most innovative aspects of this solution "Myrmidones"- energy community is the business model of co-production and co-consumption of energy to make more than profits, to have a social impact.

Highlights: The most innovative aspects of the solution

Farmers that know each other can collaborate well for any goal. First it was the transition to the stevia plant, now it's the transition to clean and affordable energy. And all steps are taken into a full democratic environment of decision making, all voices are heard. In addition, the risk is shared, and the skills are shared (not everybody needs to be an expert to all tasks). Sharing tasks within the community is also a very innovative way to work. It was the way business was done in the rural but with the years and the industrialization of agriculture was forgotten. So, it is a kind of retro-innovation, going back to basic values. Solving current social challenges with tools from the past adopted to the future!

1.1 Key social challenges addressed & objective of the social innovation

Some of the **key social challenges addressed** by the Myrmidones Energy Community - apart from Energy Poverty - are: low farm income (market vulnerability), access to land/ high land prices, administrative burden to investments, lack of attractiveness of farming profession, external risks posed by climate change, lack of appreciation/support for female farmers, lack of generational renewal on farm.

The **objective of the Myrmidones Energy Community** is mainly to tackle the energy poverty a challenge most pressing and related to the economic and social sustainability of rural areas and wellbeing of farmers by evolving them from consumers to active members and producers of energy. High value agricultural land is changing uses, grazing areas are becoming energy fields and farmers are left bowling alone in an energy market that can't control-influence. The overall goal is to create an entirely new business model, which is not only focused on creating new products and services in the renewable energy sector. The Energy Community, as a social innovation, is expected to have a range of social benefits to local community including increased autonomy, empowerment, and resilience by providing a long-term income and local control over finances, in areas where there are few options for generating wealth.

1.2 Activities

"Myrmidones" energy community is a case study where farmers own and participate in the production and/or use of sustainable energy and some of the activities till now are:

- Development of PV projects to produce energy for the members of the Energy Cooperative.
- Implement training for the members of the Energy Cooperative in many areas, including methods and ways to improve their wellbeing.

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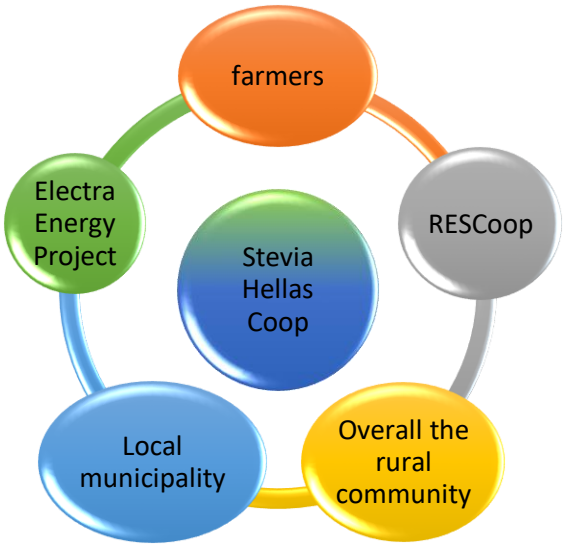
1.3 Key stakeholders involved

The Energy Coop "Myrmidones" started with 50-60 people and today they have 285 members (and raising) out of which 35-40% are female. From these women almost 60% are farmers. The key stakeholders involved range from the local farmers, the farmers of the Lamia Stevia coop to the local community the municipality and other Energy community projects.



2.4 Main outcomes of the activity

Energy Communities have the potential to drive large parts of the population out of energy poverty risk (especially small farmers) and to ensure sustainable growth for local communities without their physical burn-out since all tasks are shared. Main outcomes for the farmers refer to provision of opportunities for them to be part of the energy production, development of skills that relate to clean energy, actual production of clean energy, increased energy autonomy, empowerment, and resilience by providing a long-term additional income and local control over finances, in areas where there are few options for generating wealth.

Farmers also see the high demand for land (land-grabbing) for alternative forms of energy, to pose a risk at the viability of their farms and their farming profession; taking over the high value agricultural land by non-farmers and even nonlocal residents is causing great conflict between interested parties and additional stress to farmers.

Main outcomes for the rural area/farming community apart from increasing family income, are the strengthening of relationships and social capital. The wider society benefits from this initiative, as a large percentage of the energy produced will be channelled to the needs of the community (percentage of the energy required in schools, in the electrification of public infrastructure, etc. will be covered by the energy cooperative). In addition, jobs will be created, there will be inter-local cooperation laying the foundations for future collaborations and there will be advertising of the place, contributing more to the economic development of the place.

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2.5 Main recommendations

Farmers and practitioners may use this social innovation as an example of how to stimulate farmers and agricultural cooperatives in rural areas to take up entrepreneurial activities, to participate in energy communities or even establish their own. A decentralized-democratic energy system that on the one hand minimizes the costs for current farms and on the other hand offers opportunities for the creation of new farms and businesses that will keep young people in the area or even attract new entrants to farming by creating sustainable and decent vacancies for the unemployed etc.

What is needed is to realize is that Energy communities are building on the cooperative principles and effectively communicate them.

Farmer interview questions

Q (FARMWELL partner): How familiar are you with the concept of energy community? What do you see as the main innovation of this SI?

A (Farmer): *I was one of the pioneers that started discussions about Energy Communities 2-3 years ago. Our initiative based on the Cooperative principles that we have built Stevia Hellas Coop. In my opinion the main innovation of this project is that you are becoming the producer of your energy needed. It's a great feeling to produce your own energy as a community in the same place you consume it.*

Q (FARMWELL partner): What is the main challenge that it tries to address?

A (Farmer-member): *To be honest, the biggest challenge nowadays is the energy cost. With such high prices in combination with the volatility we are facing huge problems.*

Q (FARMWELL partner): How effective it has been?

A (farmer-President of the energy community): *We can describe effectiveness in two different pillars. Firstly, we have enhanced our collaboration among members and new farmers of our area. Secondly, we have learned many things about energy consumption and how we can save energy, until our power plants be in an operating mode and start producing clean and community-based energy.*

Q (FARMWELL partner): How does it benefit farmers? Why is it special/ inspiring in your view?

A (Farmer): *As a member of Stevia Hellas Cooperative, it is clear to me that through collaboration we can achieve more with less. In addition, it's easiest to make decisions on a community level that on a personal level, nowadays. You're looking for "accomplices" in every project.*

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Q (FARMWELL partner): What do you think works well in the SI?

A (Farmer): *Definitely, the collaboration among the members.*

Q (FARMWELL partner): What could be improved in the implementation?

A (Farmer): *The legal framework. The last four years the energy legislation have changed six times! We can't keep up with all these constant changes.*

2 The pilot action: "Power to the people: Energy communities & wellbeing for ALL"

3.1 What was the pilot about?

2.1.1 Purpose

The pilot was about bringing the social innovation on "Energy Communities" closer to farmers (especially farmers members of agricultural cooperatives) and to inspire them to use this smart solution towards their wellbeing. Energy community 'charges' farmers emotionally and socially: (em)powering members by building a community based on solidarity. With the pilot we had aimed at providing farmers of agricultural cooperatives a tailor-made solution to their specific needs, give practical information- present clear steps of the transition to social innovation and allow co-learning (peer-to-peer). In addition the pilot served as a chance to communicate the whole database of social innovations and demonstrate the Social Return of the investment tool.

2.1.2 Running the pilot

Farmers from the Cooperative of North Evia (specifically Rovies Coop & Taxiarchis Coop) visited Lamia and the Myrmidones energy community and had a two-and-a-half-day event (see the timeline that follows):

Day 1 - On Tour training

- Welcoming the 2 Women farmers from Evia at the port of Arkitsa together with Stevia Hellas' farmers and starting out on tour inspirational trip to Lamia to meet with farmers, members of Stevia Hellas Coop and Myrmidones Energy Coop as well.
- Presentation of Project FARMWELL at Stevia Hellas' premises after a small walk-through different department of the Cooperative. Interviews with the farmers by AUTh
- A day full of discussions and many, many questions… during the lunch and especially at the dinner, in companion with the two presidents of the boards. Vaggelis, Stevia Hellas' president and Thanasis Myrmidones' president. A night with a lot of knowledge exchanged through friendly discussions. Lunch and Dinner took place in different places

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of Fthiotida's area, since we are aiming to meet and discuss with as many farmers as we could.

Day 2 – Field trip & peer to peer exchange

- Training activity for energy communities and elaboration on the practical steps. Experts were invited: Presentation of Energy Cooperative Myrmidones by Thanasis Argiris, president of the Energy Cooperative.: What is an Energy Community - Who can participate in an Energy Community? – Which are the 7 International Cooperative Alliance principles? What are the main benefits being a member of an Energy Community?
- Panagiotis Karageorgos, stevia farmer and new member of the energy cooperative presented his point of view on energy communities and how they can tackle energy crisis. He gave specific examples.
- A field visit at a solar park took place with both farmers from Lamia and Evia also. Christos Stamatis, CEO of Stevia Hellas Cooperative explained how a solar park works and what are the main advantages of such an investment. Technical and Financial questions about the total project answered, since it was something that the Evia's farmers want to know about. In parallel funding schemes and funding organizations was on top priority of the discussions.

Day 3 – Field trip & peer to peer exchange

- One and a half hours discussion with the CEO of the Stevia Hellas Coop and Co-Founder of Myrmidones Energy Cooperative. After two days, including meetings with farmers and local people, a sum up meeting of all these information needed for the women from Evia. A lot of conclusions and a promise to start something similar in the Northern Evia.

2.1.3 Target group

The main target group that benefited from the piloting of this social innovation were 2 Farmers from Cooperatives of North Evia (Rovies Coop & Taxiarchis Coop). In addition, other that benefited were:

- 7 farmers from Myrmidones Energy Coop at Lamia
- 4 farmers from LamiaStevia coop
- 1 stakeholder from LaMiaStevia farmer's coop
- 1 regional representative of the prefecture Central Greece (Agrifood Partnership of Central Greece)

3.2 The main lessons from the pilot

The main lessons from the pilot are:

farmers can participate in the energy sector equally with other players.
Energy communities are not only about making profits.

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- # Participation in an energy community builds on trust and cooperative values.
- # Developing skills makes the transition to clean energy easier.
- # Women are agents of change in the rural.
- # A reformation of the law related to Energy Communities and a simplification of the procedures will inspire more groups of farmers to create their own energy community and engage actively in the energy sector.

The pilot will continue with meetings of the two women farmers that came to our pilot with other members of their agricultural cooperatives in their regions and other networks. The women will discuss on the possibilities of creating a mixed energy community with other (male and female) members of the agricultural cooperatives in Evia or establish a female energy community taking into consideration the 2nd case study escribed by the Greek partner AUTh within the FARMWELL project (see report on case study #2).

The development and success of the energy cooperative is based on strong trust (mutual assistance, good professional and community reputation / prestige, exchange of views, etc.) a personal, friendly, almost family bond. The positive economic impact has an indirect but decisive effect on prosperity, contributing significantly to the financial viability of members. In addition, the energy cooperative cooperates with both local authorities and higher authorities to resolve legal and bureaucratic obstacles that arise, proving the importance and originality of this social innovation at the national level.

All members, due to their locality, which is a strict condition for participation in the Energy Cooperative, know each other and most of them are already friends and partners, resulting in trust and good communication from the beginning. It was also stressed that through communication and cooperation of many different people with each other, a good result is achieved. Many times, as mentioned, the existence of an intermediary is necessary to facilitate the processes (innovation broker).

Concerning the adaptability of this solution a high degree of commitment can be said in completing the implementation of this initiative, as well as a lot of voluntary and extra work. Thanks to the motivation of the local authorities and the residents of the area by this social innovation, the conditions for the implementation of similar initiatives at the local level could be greatly improved in the near future.

3.3 The main impact of the pilot

Community energy encourages community engagement and control over renewable energy decision-making. It has the potential to be socially innovative because it can include all regardless of their financial situation or capital access, making sure that everyone benefits from decentralization of the energy sector. By participating in an energy community, farmers will be able to produce their own energy and increase their income locally and within their community. Improving the energy efficiency of their homes and farms has been shown to be able to lead to improvements in health.

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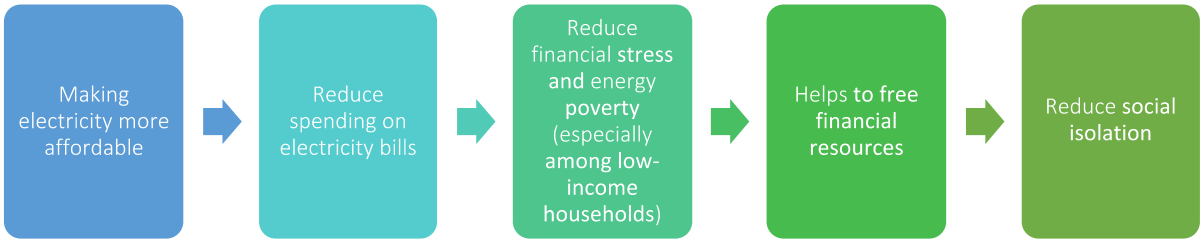

Through their participation in the pilot, farmers were able to:

- Understand the main features of the renewable energy sources.
- Determine the impact energy communities have in a community.
- Understand the opportunities and barriers of energy sector, especially in rural areas.
- Also see the challenges and benefits of cooperation.

The knowledge they acquired will help them deal with renewable energy sources in their farms and local communities and be able to solve barriers related to the energy efficiency of their homes and businesses. Gaining more expertise and becoming more well-rounded on renewable energy sources and energy communities will increase their understanding on climate and energy issues, improve their energy literacy and appropriate skills and create mutual respect towards the environment. Hence strengthen their professional identity and improve their social wellbeing in rural areas.

The direct impact of the pilot relates to the improved skills of the participants, since they had the opportunity to learn about energy communities and discuss about their problems and how they can achieve a better living through collaboration.

Interview with the President of Stevia Hellas Coop

Q (FARMWELL partner): What was your expectations from the pilot?

A (Farmer): *As always at the beginning we are all more reserved. We are looking for possible ways of building trust among others, to understand the deeper incentives of each side, while we are trying to share as much as we can. My expectation of the pilot was not high because I know that farmers are very much reluctant to new ideas. But I was really hoping that farmers from other cooperatives, especially from this area of Evia -that face multiple challenges with the recent forest fires- will come to our village and see our accomplishments.*

Q (FARMWELL partner): What impressed you the most from the pilot?

A (Farmer): *One thing impressed me more through our pilot was the fact that only women farmers came! That means something! The willingness of the participants to absorb information, knowledge, and experience from us. In my opinion this was the most crucial for the beginning.*

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Q (FARMWELL partner): What will be the follow-up of the pilot for you? (Will you be involved in similar activities? Have you changed something in what you do?)

A (farmer): We, as Stevia Hellas Coop and as Myrmidones energy community we are trying to spark as much initiatives as we can in our area, focusing always on collaboration and community-based mindset. We will continue to support the pilot project until a specific level.

⇒ *Woman farmer from Evia*

*Q (*FARMWELL partner*): What was your expectations from the pilot?*
A (Farmer): We were full of energy and positive vibes from the moment we reached Lamia. We are looking for the real story behind Myrmidones Energy Cooperative. How they gathered people in a group? Who funded the project? Who takes the responsibility for the next steps?... Things that you have to know at the beginning of the project.

*Q (*FARMWELL partner*): What impressed you the most from the pilot?*
A (Farmer): The hospitality and the willingness to help us, impressed me the most during our stay in Lamia. All the people we met were eager to share their knowledge and their expertise on issues dealing with cooperation in general. I should not forget to mention that the food was great.

*Q (*FARMWELL partner*): What will be the follow-up of the pilot for you? (Will you be involved in similar activities? Have you changed something in what you do?)*
A (Farmer): We left Lamia and people from Stevia Hellas Cooperative and Myrmidones Energy Cooperative, full of knowledge and practices that helped us to make our first, baby steps. We are close with people from Lamia and there is our first contact if we are looking for answers. We are trying to persuade as many people in our area as we can, to build something similar with the Myrmidones Energy Cooperative. In parallel, here in my area, we have established a women cooperative dealing with the cultivation and the promotion of local products. So, we must start from somewhere.

3 The Social Return on Investment (SROI)

4.1 The process of the SROI

The benefits that are usually communicated for energy communities are economic and environmental. But practice shows that several social benefits are also evident and very important when discussing farmer's wellbeing. While the environmental and economic impact of sustainable energy projects are largely measurable (in other projects and in the academic literature), it is difficult to make the same claim about the social impact.

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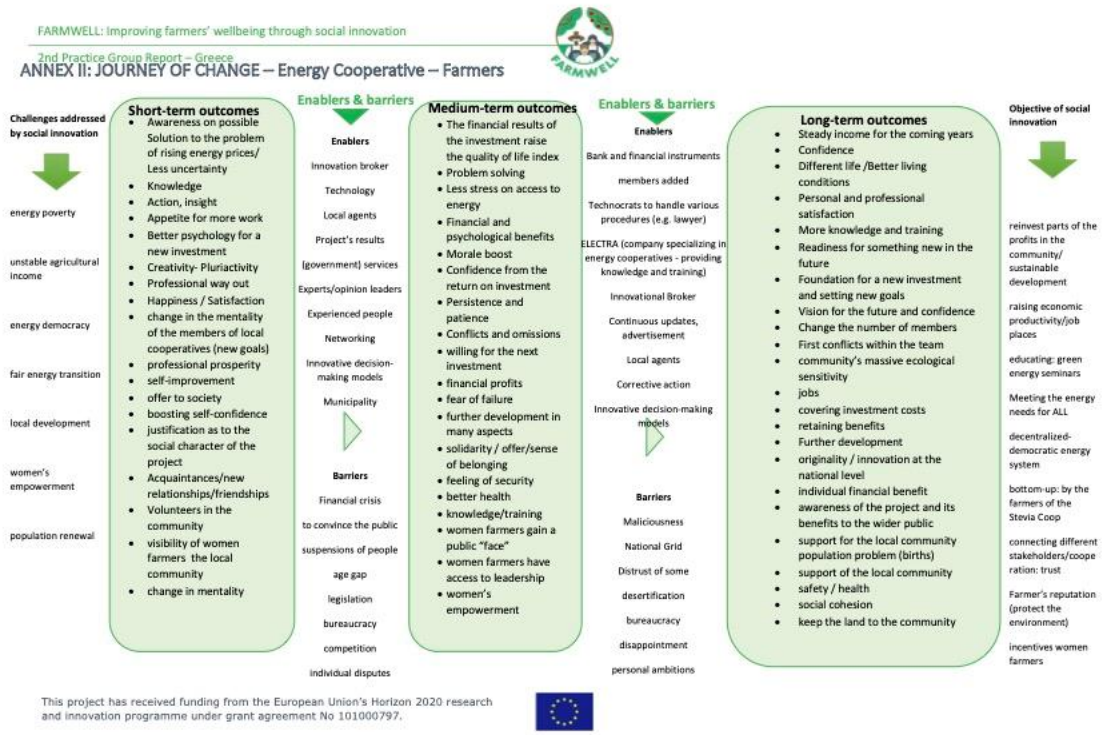
The Energy community "Myrmidones" was put on the table in order to try and identify a Social Return of Investment, in other words we tried to measure change through participation to this energy community.

During the first stages of the project we met with different focus groups in order to have an exercise on the "Journey of Change" (see figure). The two groups were (a) the farmers - members and non-members of the energy community and (b) the non-farmers (residents). Both round tables worked on the Journey of Change template prepared by UGLOS team for challenges, solutions and outcomes targeted by the actual social innovation, as well as the enablers and barriers to achieving the outcomes. A head facilitator, assisted by one script, from AUTH team, were appointed in each table to achieve fruitful discussions and facilitate the process. The findings of the JoC tables were written on separate/personal charts. Afterwards both teams joined a common session and all charts were discussed, points were clarified. After the meeting the AUTH team transcribed them to an Excel table, which also allowed displaying of logical (sometimes overlapping) relationships between the outcomes.



During the piloting phase in depth interviews and field notes were used in addition to the distribution of a full questionnaire prepared in collaboration with UGLOS team to farmers in order to provide an evaluative SROI. The project investment template was also filled in order to fully evaluate the social innovation. The investment data related to how much has been invested in the respective social innovation, including both monetary and in-kind contributions etc. It is the return on this investment that the model will then seek to estimate.

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Evaluative SROI for SI "Power to People"-EnrgCom

Journey of Change:

- **workshop with researchers** -Feedback and guidelines for the implementation of the JOC were given during a meeting with UGLOS team
- **In depth interviews with 2 stakeholders –experts on energy communities**
- **SROI exercise used focus group discussion during 2nd PG meeting (19-20 March 2022).** We organised 2 groups in a round table using the printed chart –template of the JOC. The concept of the Journey of change and guidelines for the exercise were given by the facilitator of AUTh (16 people-members of the energy community/ out of which 9 farmers)
- Discussion with UGLOS team and **Follow up interviews –survey with 1 famer –member** of the energy community and 2 women members of the WIOO network (all on-line)

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Evaluative SROI for SI "Power to People"-EnrgCom

Collecting data for the evaluative SROI:

- Working with UGLOS team to finalize of the evaluative questionnaire
- Hoping to make the interviews during the 1st piloting in Lamia at 21-22.9.2022 but…
- During 1st piloting only personal interviews (open questions-free discussions) with the farmers participating to the pilot
- Ethics requirements finalized in 15.11.22
- started to plan the interviews on 20.11.2022 by calling and making appointments
- sampling framework (the list of the members of the Myrmidones Energy community a total of 43 members (out of which **32 are farmers**)
- Finalize the interviews and make the entry to the survey portal by 23.12.2022

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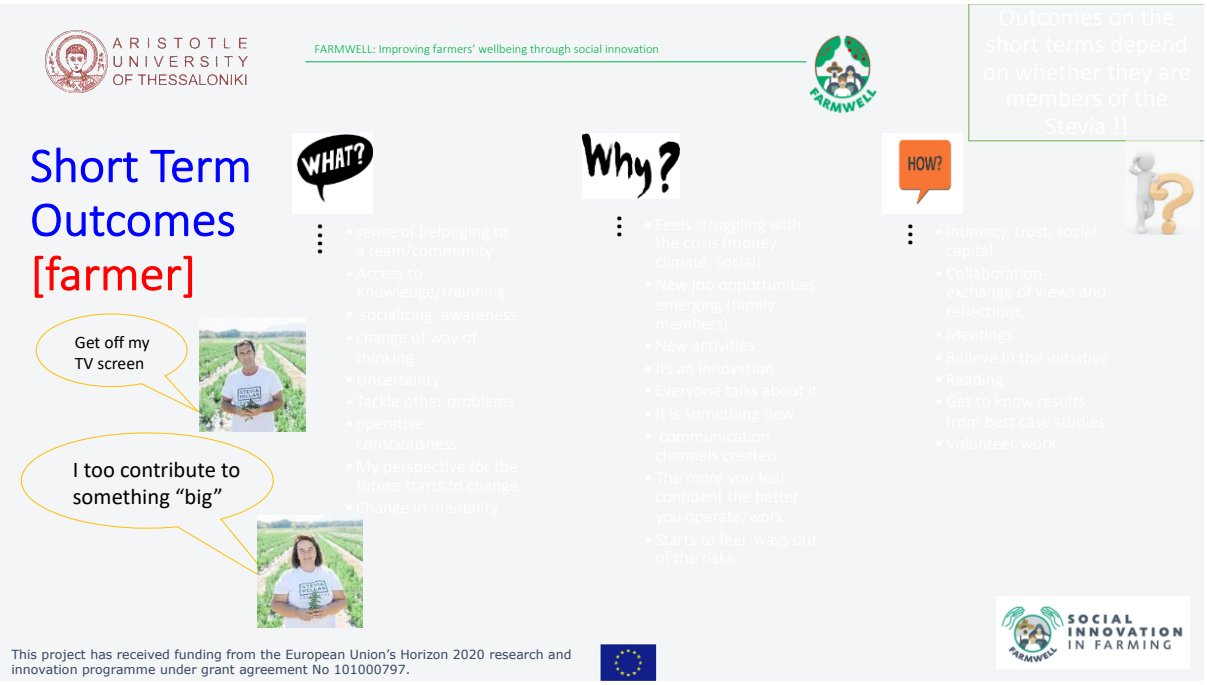
What is evident so far, by the evaluative SROI model of the Myrmidones energy community, mainly refers to the community development aspect of the energy cooperative. Social impact is rooted on higher levels of voluntary work, peer-to-peer learning, reciprocity, community budling and sense of belonging to a greater scope.



4.2 Outcomes of the SROI analysis

The summative SROI Impact Map for the Community Energy Cooperative social innovation is given in the table below. A range of wellbeing impacts over a 2-year benefit period (2020-22) were generated for a range of stakeholders including **farmers and farming families (214), cooperative members (257 plus 28 business members) and wider local community members/consumers (556)**. Some outcomes (such as empowerment) related specifically to 114 female cooperative members, of which 68 are farmers, other outcomes relate to all cooperative members, and/or to those living in the wider community.

Almost half (49%) of the value generated by the project can be categorised as 'social and community' benefits, including, for example, improved reputations of farmers and sense of trust among community members, increased awareness of networking opportunities, greater involvement in community activities and increased prominence of female farmers in the agricultural community. In terms of value, **the largest contribution, almost one third (31%), is generated by a widespread 'improved sense of trust and belonging'** experienced by cooperative members and local residents. A considerable level of value is also generated through **increased participation in community events (13.6%)** among cooperative members and local residents, and **increased visibility and prominence of women (13.4%)** experienced by female farmers and non-farmers.

Economic wellbeing forms the second largest category of outcome values (25% of the total) generated by the Myrmidones Renewable Energy Cooperative project. The values are generated by outcomes related to improved knowledge and skills (among cooperative members) and improved leadership and entrepreneurial skills among female farmers and non-farmers. As the renewable energy project is only in the early stages of development (the SROI only covers two years) no energy has been generated to date. A wide range of future economic wellbeing outcomes were identified during the Journey of Change Phase of the SROI study which have the potential to increase the future benefit streams to cooperative members and thus also increase the overall return on investment of the project.

Personal wellbeing generates 22% of the total outcome values of the project. The largest proportion of value within this category (67%, or just over two-thirds) comes from '**reduced stress and anxiety** through taking action to improve energy security' experienced by farmers and their families. This is not surprising given the level of concern expressed by farmers in relation to rising energy costs and the lack of control over farmers have over those costs. Locally produced renewable energy offers a reliable and secure means of reducing future costs, providing optimism for their future as well as contributing to a more sustainable development. Generation of renewable energy will, in the future enable local farmers and the wider community to contribute to a reduction in carbon emissions, (albeit in a small way) although this potential was not valued in the SROI model, which has focused on 'social' benefits rather than environmental impacts.

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Table: Greece Evaluative SROI Impact Map (SI: Social and community development of the Myrmidones Renewable Energy Cooperative)

Impact Pathway	Outcome	Stakeholders (No.)	Indicator/s of Change	Outcome Change (%)	Financial proxy (Value €/Unit)	Present Value (€)	Present Value (%)
Personal Wellbeing	Reduced stress and anxiety through taking action to improve energy security	Farmers (214); farming families (214)		67%	Cost of Cognitive behavioural therapy (CBT) to build psychological resilience and self esteem (€ 823 per person)	€ 84,043	22%
	Improved agency and self confidence	Cooperative members (individuals) (257)		18%	Cost of self-esteem course (€ 141 per person p.a)	€ 8,448	
	Empowerment of women - in the community and in their personal and professional lives (including improved self-efficacy and self-confidence)	Female farmers (68); female non-farmers (46).		71%	Cost of Empowerment for Women coaching programme (€ 288 per person p.a)	€ 15,519	
	Empowerment of cooperative members	Cooperative members (285)		71%	Cost of personal development course on 'delivering beyond yourself (€ 393 per person)	€ 16,998	
	Improved reputation of farmers as custodians and protectors of the environment	Farmers (214); farming families (214)		21%	Valuation for improved emotional well being arising through the Common Assessment Framework (€ 431 per household p.a)	€ 25,777	
	Increased working relationships and public private partnerships	Cooperative members (Businesses) (29)		56%	dfT estimation of business time savings (€ 2,515 per business p.a)	€ 26,768	
	Increased retention of women in the local community	Female farmers (68); female non-farmers (46).		71%	Annual membership of The Future of Women online community for connection, learning and leadership.	€ 23,485	

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Social and Community					(€ 813 per person)		49%
	Improved sense of trust and belonging (including trust in working with others)	Individual cooperative members (257); Local consumers (556)		67%	Value to an individual (25-45) of feeling like they belong in their neighbourhood (€ 1,336 per person)	€ 90,998	
	Increased regional, national and international networking and collaboration	Cooperative members (285)		69%	Cost a networking/training event and one hour of time devoted to networking at the average hourly earnings rate (€ 46 per person)	€ 3,243	
	Increased municipal, community and organisational support for other community projects and enterprises.	Cooperative members (285)		69%	Average size of a charitable donation in the UK (€ 244 per household p.a)	€ 31,968	
	Increased participation in community and charity events	Cooperative members (285); Local consumers (556)		70%	Average annual household spend on recreation and culture (€ 100 per person p.a)	€ 39,248	
	Increased visibility and prominence of women in the agricultural and wider community	Female farmers (68); female non-farmers (46).		71%	Value to an individual (25-45) of feeling like they belong in their neighbourhood (€ 1,336 per person p.a)	€ 38,572	
	legitimisation of local ideas/projects to a wider community	Local Community (556)		75%	Cost estimate for Local Authorities of implementing proposed duty to promote local democracy (€ 28,234 per district/community)	€ 7,553	
Economic Wellbeing	Improved life and work skills and knowledge	Cooperative members (285)		76%	Cost of employability skills training in regular sessions with counsellor/coach	€ 74,718	25%

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					(€ 967 per person p.a)		
	Improved leadership and entrepreneurial skills	Female farmers (68); female non-farmers (46).		71%	Earnings differential realised by completing an HND/HNC qualification (€ 1,320 per person p.a)	€ 71,255	
Environmental Wellbeing	Increased awareness of the level of energy use	Cooperative members (285); Local consumers (556)		79%	Reduction in energy bills as a result of increased awareness of energy use (€ 158 per household/business)	€ 22,201	4%
					Total benefits	**580,794**	**100%**
					Total Investment	166,454	
					Benefit-Investment Ratio (BIR)	**3.49 : 1**	

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4 Implications for policy and farming support

5.1 The Challenge & Needs – What is the situation?

The key challenge and bottlenecks that need to be addressed in realizing Energy Communities include weaknesses in the legal environment, lack of specialized services, lack of funding, and a lack of cooperation culture among farmers.

In terms of the **legal environment**, the current laws related to Energy Communities are seen as a barrier to the creation of such communities. As one farmer stated, *"The legal framework is complex and confusing, which makes it difficult for us to create our own energy community."* A policy or institutional support instrument should address this by simplifying the legal procedures and providing clear guidelines for the creation and operation of energy communities. It is worth mentioning that during the project's duration the National legislative framework on energy communities changed 5 times. The first Law[1] introducing energy communities was in 2018, with a number of articles added and altered since then and in 2020 a new Law[2] changed again the scene raising several conflicts and public debate[3].

The **lack of specialized services** is also a major challenge for farmers. As one farmer highlighted, *"We need specialized services and support to develop and operate our own energy community."* A policy or institutional support instrument should provide access to specialized services and support for farmers, such as technical assistance, financial advice, and training programs.

Lack of funding is another need expressed by farmers looking to create energy communities. As one farmer noted, *"We need funding to invest in renewable energy technologies and infrastructure."* A policy or institutional support instrument should provide financial support for the creation and operation of energy communities, such as grants, loans, and tax incentives.

Finally, the lack of cooperation culture among farmers is a significant challenge to the development of energy communities. As one farmer stated, *"We need to develop a culture of cooperation and trust among farmers to create and operate energy communities."* A policy or institutional support instrument should promote cooperation and collaboration among farmers, by providing opportunities for networking, knowledge sharing, and building relationships between farmers.

By providing support in areas such as legal, financial, technical, and cooperative aspects, such an instrument can help farmers successfully co-create and co-operate contributing to their social and economic wellbeing.

[1] N.4513/2018
[2] N.4759/2020
[3] Development of energy communities in Greece: challenges and policy recommendations [in Greek]

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5.2 Support framework – What is needed?

Access to funding: Energy Communities need funding to invest in renewable energy projects, develop the necessary skills and knowledge, and build partnerships with other stakeholders. But to ask for fund the whole range of benefits deriving from energy communities has to be communicated.

Legal and policy support: Governments need to provide a supportive legal and policy environment that enables the growth of energy communities, including access to energy markets, grid connection, and regulatory support. In addition, the consistency of the legal framework is very important.

Technical support: Energy Communities need technical support to develop and implement renewable energy projects, including access to expertise in engineering, project management, and financing and people – facilitators that really know how to work with groups-especially coming from farming communities.

Community engagement: Energy Communities need to engage with local communities, building trust and support for their projects and raising awareness of the benefits of renewable energy.

Gender balance: Rural women can and should be included in the energy sector either in mixed cooperatives or within Women's Energy Communities can help overcome the specific needs of rural areas by empowering women to take a leading role in the transition to clean energy, providing additional income streams for farming communities, and building social cohesion through community ownership of renewable energy projects.

The added value of Energy Communities with reference to the SROI outcomes includes improved access to energy, reduced energy costs, increased income for rural communities, and social benefits such as increased community cohesion and empowerment. The added value of Women's Energy Communities with reference to SROI outcomes includes the creation of social, economic, and environmental benefits for women and their communities.

Some quotes highlighting the positive outcomes of participating in Energy Communities include:

- *"The Myrmidones Energy Community is an initiative with limited risks and anxieties, that requires skills, easily achieved by farmers."*
- *"Energy Communities have the potential to drive large parts of the population out of energy poverty risk (especially small farmers) and to ensure sustainable growth for local communities."*
- *"Main outcomes for the farmers refer to provision of opportunities for them to be part of the energy production, development of skills that relate to clean energy, actual production of clean energy, increased energy autonomy, empowerment, and resilience by providing a long-term additional income and local control over finances, in areas where there are few options for generating wealth."*
- *"Main outcomes for the rural area/farming community apart from increasing family income, are the strengthening of relationships and social capital."*

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5.3 Recommendations – What needs to be done to realise the support needed?

Governments, NGOs, and private sector organizations should support the establishment and scaling up of Energy Communities and similar social innovations.

Financing mechanisms such as grants, loans, or crowdfunding can be used to support the development of these communities and enable women to invest in renewable energy technologies.

Policy instruments such as tax incentives, subsidies, and feed-in tariffs can be used to support the uptake of renewable energy and help reduce energy poverty.

Capacity-building and training programs can help increase the technical and entrepreneurial skills of women in energy and enhance their access to markets, finance, and networks.

Partnerships between different stakeholders, such as women's organizations, energy providers, financial institutions, and government agencies, can help leverage resources, share knowledge and expertise, and create synergies.

Specialized support organizations such as women's groups, energy agencies, and impact investors can help provide technical assistance, funding, and networking opportunities to Women's Energy Communities and similar initiatives.

Policymakers can adopt enabling policies and regulatory frameworks that promote gender equality, renewable energy, and social innovation, and ensure that women's voices and needs are taken into account in energy decision-making.

Collaboration and advocacy efforts can help raise awareness about the benefits of Women's Energy Communities and catalyze support from a broad range of stakeholders.

Learning from successful cases of Women's Energy Communities in different contexts and sharing best practices and lessons learned can help replicate and scale up these initiatives.

5.4 Existing environments where this is already happening

One of the major "players" in the energy community ecosystem that helped this case study develop was Electra Energy part of the REScoop.eu, the European federation of energy cooperatives. REScoop team has developed a toolbox with policy papers on energy poverty and Electra Energy several publications within the Greek context.

Another initiative happening is the **WEnCoop,** the first women energy cooperative in Europe and globally and can serve as a best practice example on how an Energy Community has positively impacted the local community. It is an award-winning project, one of the most influencing projects in 2022 according to The Women & Gender Constituency from United Nations Framework Convention on Climate Change. Their achievements and their scope were presented to the farmers of the Myrmidones energy community as a good example of gender balance within the energy sector.

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Farmer interview questions

Q (FARMWELL partner): In your opinion, what are the main needs of farmers in the context of social innovation that should be addressed through support?

A (Farmer): *One of the main needs of farmers is access to information and training on new, innovative practices that can help improve their farming techniques and increase their productivity. Farmers also need support in terms of access to resources and technology, such as improved irrigation systems, that can help them mitigate the impact of climate change on their crops. Additionally, social support is crucial, including access to mental health resources and assistance with navigating the complex bureaucratic systems that often govern farming practices and regulations.*

Q (FARMWELL partner): What do you think needs to happen to make similar support actions available to farmers and their social innovations a reality?

A (Farmer): I *believe there needs to be greater collaboration and partnership between farmers, NGOs, and government agencies. This includes increased funding for social innovation projects that benefit farmers, as well as greater investment in research and development to identify new, effective farming practices. There also needs to be more support for networking and knowledge-sharing between farmers, so that we can learn from each other and adopt the most effective approaches to farming and social innovation.*

Q (FARMWELL partner): Who do you think should take responsibility for organizing and funding these support actions for farmers and their social innovations?

A (Farmer): *I think there is a shared responsibility between government agencies, NGOs, and the private sector to provide support for farmers and social innovation projects. It's important to have a collaborative approach and involve all relevant stakeholders to ensure that support is effectively targeted and reaches those who need it most. Additionally, there should be greater involvement of farmers themselves in decision-making processes, so that the support provided is more tailored to their specific needs and priorities.*

Farmer interview questions

*Q (*FARMWELL partner*): Thank you for taking the time to speak with us today. Can you tell us a bit about your experience as a farmer and some of the challenges you face in your work?*

A (Farmer): *Of course. I've been farming for over 20 years now and it's been a tough road. There are so many challenges that come with the job, from unpredictable weather conditions to market fluctuations that make it hard to make a living. But I think one of the biggest challenges we face is the lack of support for farmers, especially when it comes to issues like mental health and wellbeing.*

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*Q (*FARMWELL partner*): That's certainly something we've been looking into with our social innovation project. What are some of the main needs of farmers that you think should be addressed through support?*

A (Farmer): *Well, I think mental health is a big one. Farming can be a very isolating profession, and the stress of trying to make a living can take a toll on your mental wellbeing. It would be great to have more resources available for farmers to help them cope with these challenges.* Another big issue is access to resources and training. As farming practices evolve, it can be hard to keep up with the latest technology and techniques. It would be great to have more support available to help farmers stay up-to-date and improve their operations.

*Q (*FARMWELL partner*): Those are certainly important needs. What do you think needs to happen to make similar support actions available to farmers and social innovations a reality?*

A (Farmer): *I think it's going to take a lot of collaboration between farmers, organizations, and policymakers. We need to work together to identify the needs of farmers and come up with innovative solutions to address those needs. It would also be helpful to have more funding available to support these initiatives. Farming is such an important industry, but it often gets overlooked when it comes to funding and support.*

*Q (*FARMWELL partner*): That's a good point. Who do you think should take the lead in funding or supporting these initiatives?*

A (Farmer): I think there's a role for everyone to play. There are some great organizations out there that are doing great work to support farmers, and it would be great to see more support for those groups. At the same time, I think policymakers need to step up and provide more funding and support for the industry as a whole. We need to recognize the importance of farming and invest in the future of our farmers.

*Q (*FARMWELL partner*): Lastly, what is social innovation for you in the context of farming?*

A (Farmer): I think social innovation is all about finding new and innovative ways to address the challenges that farmers face. It's about coming up with new solutions to improve the wellbeing of farmers and their families, and to make farming a more sustainable and profitable industry.

For me, social innovation is about bringing together farmers, organizations, and policymakers to work together to find solutions that really work. It's about investing in the future of farming and making sure that our farmers have the support they need to thrive.

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