





REGIONAL ACTION PLAN

Project: ENERSELVES - Policy instruments for energy self-consumption in buildings

Marshal Office of Świętokrzyskie Region

Kielce, 2019r.

Project ENERSELVES is implemented through the Interreg Europe programme co-financed by ERDF









"ENERSELVES - Policy instruments for energy self-consumption in buildings" project is realize by Investor and Entrepreneur Service Center, operating within the Investment and Development Department of the Marshal Office of the Świętokrzyskie Voivodship in Kielce.

ENERSELVES project is realize under European Union INTERREG EUROPE programme Priority axis 3: 'Low-carbon economy', Specific objective 3.1: Improve the implementation of regional development policies and programmes, in particular programmes for Investment for Growth and Jobs and, where relevant, European Territorial Cooperation programmes, addressing the transition to a low-carbon economy.







Table of contents

GENERAL INFORMATION ABOUT THE PROJECT	4
CURRENT SITUATION OF THE REGION, SWOT ANALYSIS	5
DETAILED INFORMATION ON ACTIONS	8
Action No. 1 Development of provisions in the updated Development Strategy of the Voivodeship, which will promote solutions limiting large energy losses and costs of R	
Basic information	9
Experience acquired through the implementation of the project	10
Detailed information about the action	10
Entities involved in the implementation of the action	11
Timeframe	11
The costs of implementing the action	12
Action No. 2 Establishment of an internet platform supporting the development of R construction sector	
Basic information	13
Experience acquired through the implementation of the project	13
Detailed information about the action	13
Entities involved in the implementation of the action	14
Timeframe	14
The costs of implementing the action	14
Action no. 3 Change in the management of the ROP policy instrument concerning the of project selection criteria under measure 3.1 supporting the RES solutions	•
Basic information	15
Experience acquired through the implementation of the project	16
Detailed information about the action	17
Entities involved in the implementation of the action	17
Timeframe	17
The costs of implementing the action	17
Action No. 4 Establishment of a supporting tool that will enable proper development in buildings under the ROP policy instrument	
Basic information	19
Experience acquired through the implementation of the project	20
Detailed information about the action	20
Entities involved in the implementation of the action	20
Timeframe	20
The costs of implementing the action	21
Monitoring of the implementation of all activities	21







GENERAL INFORMATION ABOUT THE PROJECT

Project: ENERSELVES - Policy instruments for energy self-consumption in buildings

Partner organisation: Marshal Office of Świętokrzyskie Region

Country: Poland

NUTS2 region: PL72

Contact person: Błażej Nowiński

email address: blazej.nowinski@sejmik.kielce.pl

phone number: +48 41 306 70 23

Project duration:

Phase 1: 01/01/2017 – 31/12/2018 Phase 2: 01/01/2019 – 31/12/2020

PROJECT DESCRIPTION:

Energy Performance of Buildings Directive (EPBD) requires Nearly Zero-Energy Buildings (NZEBs) in 2020 and all new public buildings by 2018. Even so, the integration of RES for self-consumption in NZEB buildings remains a challenge for 1/3 of the Member States, which have not included it in their National Directives.

Moreover, the introduction of RES for self-consumption in buildings is not considered as cost-optimal energy in every country. Regional authorities have a key role to play in identifying their cost-optimal RES in order to mobilize local stakeholders and creating new policies to support the integration of RES in buildings.

OBJECTIVE:

ENERSELVES focus in the integration of RES for self-consumption, but not every RES is cost-effective for every region, so it needs an in depth analysis and a definition of clear KPIs to identify the best value-for-money investment. Due to the necessity of optimizing the limited SFs, only by focusing in the RES that provided higher impact on the Growth and Jobs the regions will be investing their funds in a proper manner.

Enerselves focuses on designing policies to promote only those RES for self-consumption technologies with higher benefits in each region.

OUTPUTS:

- Improving 7 OPs in 7 EU regions, involving 4 Managing Authorities and 3 key energy actors.
- Influencing 11,8 M€ of SFs by the policy instruments
- -175 people increasing professional capacity attending interregional events
- 37 policy learning events with stakeholders
- 110 good practices identified and collected in a Guide of Best Practices

BUDGET:

Total budget: 1,598,431.00 Euro

Marshal Office of Świętokrzyskie Region: 174,056.00 Euro







CURRENT SITUATION OF THE REGION, SWOT ANALYSIS

Świętokrzyskie Voivodeship, located in Central and Southern part of Poland, is the second, smallest in terms of area, Polish Voivodeship. The region is characterized by one of the lowest rates of urbanization in the country. Świętokrzyskie is adjacent to six voivodeships, including four: Mazowieckie, Małopolskie, Śląskie and Łódzkie, where metropolises of international and supraregional importance are located - Warsaw, Kraków, Katowice and Łódź. Distance from Kielce, the capital of the Świętokrzyskie Region, varies from 120 to 180 kilometers to the largest Polish centers of economic development.

Świętokrzyskie Voivodeship is located near the Eastern border of the European Union and together with the remaining four voivodships (Warmian-Masurian, Podlasie, Lublin and Podkarpackie) is part of the Eastern Poland macroregion. In Świętokrzyskie, there are problems of an economic nature (unfavorable economic structure with a large concentration of employment in agriculture), social (high unemployment rate) and spatial (clear disproportions in development within the region).

SWOT ANALYSIS IN THE CONTEXT OF THE ENERELVES PROJECT:

Opportunities

- Świętokrzyskie Voivodeship is characterized by a large diversity of natu-ral environment, which creates con-ditions for the development in the re-gion of most available technologies of generating energy from renewable sources...
- Wind energy can be used mainly in the northern and north-eastern part of the region in the following poviats: Konecki, Skarżysko, Starachowice, Ostrowiec, Opole, Sandomierz and in the northeastern parts of the Kielce and Staszów poviats.
- Due to environmental constraints, the creation of high power turbines is significantly impeded. Recently, however, there are small installations based on maximum modules of 0.6 kW, which may contribute to the increase of energy coming from the wind. In addition, their relatively low price and the size, thanks to which they are not subject to restrictive environmental regulations, will contribute to the creation of installations in the SME sector and at households.
- A growing interest of home and foreign investors in launching biogas plants based on agricultural substrate.

Strengths

- Favorable conditions for obtaining hydropower and solar energy occur in the area of almost the entire region.
- In the voivodship in 2017, 20 large PV installations with a total capacity of 0.6 MW were installed. What in combination with the rapidly increasing number of micro prosumer installations gives a total capacity of about 2.5 MW.
- Considering the significant increase in power generated by solar installations over the last three years. It should be concluded that this trend will continue at a similar level of growth, especially among pre-commune installations.
- The region is characterized by a well developed spatial power grid and existing power reserves.
- Clusters operating in the voivodeship: Świętokrzyski and Podkarpacki
- Energy Cluster,
- Cooperation with the R+D sector and investment in its own home infrastructure R+D;
- There is the Department of Environmental, Geomatic and Energy Engineering at the Kielce University of Technology;
- The Investor Assistance Centre in the Marshal Office of the Świętokrzyskie Voivodeship deals with foreign investment, business matchmaking, organising events on RES for







- There are 35,000 to 40,000 ha of GO suitable for growing corn and energy beet to be turned into biomass.
- Decentralised energy as a possible market of a dozen or so prosumers
- Huge reserves of geothermal waters have been discovered in Kazimierza Wielka (south of the voivodeship).
- Poland's geothermal energy resources have been calculated at 1512 PJ / year.
- In Poland there are about 6600 km2 of geothermal water. These resources are found in geothermal pools and subareas belonging to geothermal provinces.
- Two of these areas cover the Świętokrzyskie region with considerable over-reach. These are: Devonian-Carboniferous pool - The temperature of these waters 50-90 °C and Low-water basin - It is a pool with high water temperature and high content of iodine and bromine.

- companies within the sector;
- Traditional Farming Lands large area of uncultivated land as a potential for growing energy plants;
- High employment in agriculture;
- Low temperature geothermal energy;
- Geothermal reserves are usually local so they can be used near the extraction site:
- Geothermal power plants do not affect the landscape to the same extent as tams or wind turbines;
- Geothermal reserves are always available as opposed to wind energy and solar energy which depend on the weather.
- One of the municipalities of the region (Połaniec) has already started preparatory and expert work to determine the cost-effectiveness of creating a geothermal energy-based installation. Initial research conducted in the commune indicates a high energy potential of the source. If the results are confirmed, the whole municipality can become self-sufficient in a short time. In addition, it will contribute to the development of technologies and development of specific solutions for future installations of this type in the whole region.

Threats

- About 13% of the entire length of the network are cable lines, the remaining about 87% are overhead lines.
- Low voltage lines account for over half the length of all power lines in the province.
- A significant factor limiting the development in the field of renewable energy is a series of enforcement activities to the Mouth regulating the market. Limiting the rights granted to citizens and imposing on prosumers (in executive regulations, tax interpretations, network codes, practice of monopolies, and finally in the amendment of the RES Act of June 2016) additional costs and obligations making

Weaknesses

- The region is characterized by a nonsufficient level of energy planning in municipalities, caused by a lack of sufficient financial resources, poor technical condition of medium and low voltage networks.
- Infrastructural constraints, in particular as regards the development of energy networks, constitute a serious barrier both in meeting the energy needs of the inhabitants of the region (energy security) and in the development of RES, because one of the most important factors determining the development of the RES industry is the possibility of connecting infra-structure to the power grid.







it unprofitable prosumer business in the energy market. The threat is the energy pricing system, which is unpredictable, unpredictable, and prosumers have no influence on it. Among these threats, the greatest seems to be the pursuit of energy sellers to introduce "subscription" tariffs at which it is not profitable to save energy from the state network (also by producing energy for their own needs).

- Built largely in the 60-70 of the last century, in the period of significantly lower demand for electricity, they do not meet current needs and requirements. Due to poor technical condition (almost 50% exploitation) and limited capacity, they require significant expenditure on reconstruction and modernization. Particular attention in this area requires power grids in rural areas
- The provisions resulting from the Act regarding the location of wind generators at a considerable distance from residential developments.
- Biogas is explosive substance which can cause explosions in biogas in-stallations, but there is also a risk of explosion of biogas migrating from dumping grounds if they have not been properly sealed;
- Investments in the construction of geothermal installations would be on the threshold of profitability if there are appropriate conditions. Selecting in domestic conditions is profitable when up to a depth of 2 km the wa-ter reaches the temperature of 65 ° C, the salting does not exceed 30 g / I and the efficiency of the source must be taken into account.

- Most public and multi-family buildings were commissioned at a time when building solutions did not take into account the thermal insulation of buildings, and the appropriate temperature was provided by heating systems that would draw large amounts of energy. Outdated solutions lead to large energy losses, exposing users to financial losses. They also cause a significant emission of harmful agents to the atmosphere.
- Exploitation of geothermal is costly in terms of building installation.

The economy of Świętokrzyskie region is based on leading industries with high innovative potential, and which have been identified in the Research and Innovation Strategy (RIS3) "From absorption to results - how to stimulate the province of Świętokrzyskie 2014 - 2020+".







Four main smart specializations were chosen, offering the greatest development opportunities of the region, conditioned by the potential of expansion and the current participation in the local economy:

- 1. Resource-efficient construction.
- 2. Metal-foundry sector.
- 3. Health and pro-health tourism.
- 4. Modern agriculture and food processing.

and three horizontal specializations:

- 5. ICT (information and communication technologies).
- 6. Trade and congress industry.
- 7. Sustainable energy development.

DETAILED INFORMATION ON ACTIONS

The Action Plan aims to impact: x Investment for Growth and Jobs programme

European Territorial Cooperation programme

X Other regional development policy instrument

Name of the policy instrument addressed:

- Development Strategy of the Świętokrzyskie Voivodeship

- Regional Operational Programme for Świętokrzyskie Region 2014-2020

As part of the Action Plan, **four actions** are foreseen that will have a direct impact on the two aforementioned policy instruments. The first of them is the **Regional Operational Program of the Świętokrzyskie Voivodeship 2014-2020**, which will be improved thanks to Action 2, 3 and 4 through:

- > creation of an internet platform supporting the development of renewable energy sources in construction industry as a tool promoting the financing of RES projects under the Regional Operational Program for the Świętokrzyskie Voivodeship 2014-2020,
- > creating recommendations regarding the optimization of project selection criteria as part of the supporting action of RES in buildings,
- > creation of a supporting tool that will enable proper development of RES policy in buildings as part of the ROP policy instrument.

The second policy instrument that will be improved is the currently update **Development Strategy for the Świętokrzyskie Voivodeship** by taking into account provisions that will promote solutions limiting large energy losses and the costs of using renewable energy sources.







Action No. 1 Development of provisions in the updated Development Strategy of the Świętokrzyskie Voivodeship, which will promote solutions limiting large energy losses and costs of RES use

Objective of the action: Improvement of the policy instrument, ie the Development Strategy of the Świętokrzyskie Voivodship by taking into account provisions that will promote solutions limiting large energy losses and the costs of using renewable energy.

Justification for the implementation of the action: The current provisions of the Development Strategy of the Świętokrzyskie Voivodeship insufficiently describe how to optimize the use of renewable energy especially in the context of the energy self-sufficiency of buildings.

Basic information

Świętokrzyskie Voivodeship is characterized by a large diversity of the natural environment, which creates conditions for the development of the majority of available technologies of generating energy from renewable sources in the region. Favorable conditions for obtaining hydropower and solar energy occur in the area of almost the entire region. Wind energy can be used mainly in the northern and north-eastern part of the region in the following poviats: Konecki, Skarżysko, Starachowice, Ostrowiec, Opatów, Sandomierz and in the north-eastern parts of the Kielce and Staszów poviats. Biomass is another source used for energy production. Potential areas for the cultivation of plants used as biomass are fallow land and fallow, which in our province is about 82 thousand. ha. In addition, it is estimated that about 50 thousand. ha of permanent pastures (meadows and pastures) have been abandoned. On these lands, agricultural production directed at energy goals can be restored in an easy and cost-effective manner.

The region is also characterized by a well developed spatial power grid and existing power reserves. A significant limiting factor in RES development is a number of enforcement activities to the Act regulating the market. The current law limits and imposes on prosumers (in implementing regulations, tax interpretations, network codes, practice of monopolies, and finally in the amendment of the Renewable Energy Act of June 2016) additional costs and obligations that make unprofitable activity on the energy market. The threat is the energy tariff system, which is opaque, unpredictable, and prosumers have no influence on it. Among these threats, the greatest seems to be the pursuit of energy sellers to introduce "subscription" tariffs at which it is not profitable to save energy from the state network (also by producing energy for their own needs).

The region gains experience related to the use of renewable energy and monitoring the use of energy, leading to a reduction in its consumption. These experiences flow, among others from the implementation of projects financed from EU funds in the financial perspective 2007-2013 (eg Construction of autonomous house in Podzamcze near Chęciny for the purposes of energy efficiency study for the development of the Świętokrzyskie Region in the field of Energy Efficiency specialization, solid biomass research laboratory, biogas and biofuels research and methods their effective energy use), as well as from participation in partner projects financed under the INTERREG program.







Experience acquired through the implementation of the project

Within the above-mentioned area, the following good practices were identified during a partner exchange of experience at the international level:

- For several years, the ENERSELVES Project Leader, ie the "AGENEX" agency, has been promoting Renewable Energy Sources in buildings owned by the Regional Government, the District Councils of Badajoz and Cáceres, and municipalities. These activities help the Extremadura region in systematic increase of higher photovoltaic production.
- Another project partner, ie the Energy Agency for South-Eastern Sweden, presented a new digital system for monitoring energy consumption and own energy production in its buildings. It turned out to be a useful tool for maintenance personnel for optimal use and organization of the building's functionality. He also presented systems for monitoring energy consumption, thanks to which municipal buildings become energy-efficient in the long-term.

Detailed information about the action

Development of provisions in the updated Development Strategy of the Świętokrzyskie Voivodeship regarding the promotion of solutions that will limit large energy losses, expose users and owners to additional costs and reduce the emission of harmful factors to the atmosphere.

In order to optimize the use of renewable energy, and taking into account the experience of the project partner from Sweden, used solutions, related to the monitoring of energy consumption in buildings and generation of energy from renewable sources should also be promoted. In connection with the above, it will be necessary to supplement the provisions of the Strategy so as to more clearly indicate activities that will optimally affect the development of the RES sector in our region.

In connection with the huge needs for thermal modernization of buildings identified, provisions should be developed that will promote further extensive support in the above area and will influence the development of optimal solutions in this area.

In reference to the experience gained within the ENERSELVES project, solutions should be promoted that, taking into account the development conditions of individual installations in the region, will have an impact on the fastest and most effective development of RES. Therefore, the entries that should eventually be included in the Strategy should take into account favorable conditions for obtaining hydropower or solar energy occurring in the area of almost the whole voivodship and wind energy, which can be used mainly in the northern and north-eastern part of the region.

At this point, we should also point to the experiences from projects carried out by a partner from Malta. He presented, among others establishment of the undertaking, which aims to identify barriers to the use of EU funds and to plan and implement integrated programs in the field of sustainable energy. In connection with the above, during the meeting of the local stakeholder group, the need for a deeper diagnosis in relation to the energy self-sufficiency of buildings was discussed. Participants of the meeting agreed that work meetings are necessary to develop appropriate provisions in the Strategy.

The above analysis results not only from international partner meetings and meetings of the local stakeholder group, but also based on the document self-assessing the region in terms of energy self-sufficiency of buildings.







Activities within the framework of the Strategy update, among others:

- work on developing appropriate provisions in the document, with the participation of decision-makers in the field of policy development in the region,
- public consultations and cooperation with departments and institutions and organizations that influence the provisions in strategic documents,
- expert consultations in the field of renewable energy sources,
- dissemination of developed solutions (both under the ENERSELVES project and the previously mentioned work) as part of work on the updating the document

Entities involved in the implementation of the action

Entities from the group of stakeholders identified during the project implementation, including in particular:

- Regional Centre for Innovation and Technology Transfer LTD,
- Kielce University of Technology,
- Busko-Zdrój Health Resort,
- Entrepreneurs,

and decision-makers in the field of policy creation in the region, in particular the Board of the Świętokrzyskie Voivodeship, Communes, Districts and Districts Authority Offices.

Timeframe

Below, the schedule of work on the first action. It should be noted that this is a draft of the schedule. Currently, work is under way on the final version of the update schedule of the Development Strategy for the Świętokrzyskie Voivodship actualisation.

	I 2019	II 2019	III 2019	IV 2019	V 2019	VI 2019	VII 2019	VIII 2019	IX 2019	X 2019	XI 2019	XII 2019	2020
Work on				THE T				S - 1		1			
developing													
appropriate provisions in the													
document, with													
the participation													
of decision-													
makers in the													
field of policy													
development in													
the region													
Preparation of													
provisions													
proposals to the													
Strategy promoting RES in	1.7.17												
construction													
sector based on													
the experience of													
the ENERSELVES	100												
project													
Public and expert													
consultations							- 21						
Adoption of the													
updated Strategy													
Dissemination of developed													
solutions (both													
under the													
ENERSELVES													
project and the													







previously				
mentioned work)		[-]		
as part of work on				
the updating the				
document				

These activities will be part of the overall work carried out as part of the update of the Development Strategy of the Świętokrzyskie Voivodeship. Report on the implementation of "Action No. 1" will be included in the report on public consultation as part of the updated document.

The costs of implementing the action

The costs of this action will be incurred as part of the ongoing activities of the Marshal's Office of the Świętokrzyskie Voivodeship referring to the process of updating the Development Strategy of the Świętokrzyskie Voivodeship.

The total cost of updating the Development Strategy	260 000 PLN, approximately 60 000 Euro
of the Świętokrzyskie Voivodship, including the cost	, 11
of work related to the development of provisions that	
will promote solutions that limit large energy losses	
and the costs of RES use, including:	
expert consultancy services in the process of	173 800 PLN, approximately 40 000 Euro
developing the Development Strategy of the	•
Świętokrzyskie Voivodship	







Action No. 2 Establishment of an internet platform supporting the development of RES in construction sector

Aim of the action: creation of an internet platform that brings together interested parties and provides relevant information while being a platform for the exchange of information on the implementation of RES / EWE solutions in construction sector.

Justification for the implementation of the action: after analyzing the demand in the Świętokrzyskie region on this type of organ, it was found reasonable to start work on the implementation of solutions indicated in the project.

Basic information

After a preliminary analysis of needs and consultations with stakeholders, within the working groups of the project, the demand for creating an internet source of information in the field of RES / EWE in the Świętokrzyskie region was revealed. This mainly concerns the complexity of information regarding: sources of financing and access to a database of specialists in a given field, knowledge about existing technologies. They will help in contacts and obtaining information about the use of renewable energy in construction.

In connection with the above, it was deemed necessary to create an internet platform in the region that brings together interested parties, such as consultants, designers, companies realizing investments, and provides relevant information as a platform where parties interested in implementing RES / EWE solutions in construction meet.

Experience acquired through the implementation of the project

The importance of developing information tools and the positive results obtained through the use of these tools, especially when it comes to promoting new technologies, is emphasized by the example of good practice presented by the Lazio region, Italy - Creation of www.energia.cnr. It encourages energy saving and stimulates activities and initiatives aimed at reducing energy consumption.

Detailed information about the action

The first step in building an internet platform is to create a separate dedicated section (subpage) within the existing website of the Investor and Entrepreneur Service Center of the Marshal's Office of the Świętokrzyskie Voivodeship, which contains a structured database of industry specialists and provides information on technologies and presents examples of good practices.

The beneficiaries of the website are residents of the region and registered websites (companies, industry experts) wishing to implement projects regarding energy renovation of existing buildings, construction of new high energy efficiency plants, installation of renewable energy systems in buildings or near buildings for personal consumption, thermo-modernization of buildings. By engaging in the creation of an Internet platform for project stakeholders, access to knowledge and experience resulting from the project for all interested parties in the region, both natural persons and companies and institutions from the RES industry will be ensured.

The actions to be taken as part of the platform launch are as follows:







Mapping regional private entities in areas such as:

- consulting,
- design,
- architecture,
- energy audit of buildings,
- installers,
- construction companies,
- technology providers

The information and data contained on the website will be partly based on existing sites / databases owned by, for example: Świętokrzysko-Podkarpacki Energy Cluster, Kielce University of Technology, List of Certified Auditors / Experts on Energy, Regional Science and Technology Center, etc.

The structure of the database will enable sorting of necessary information about relevant specialists and will enable easy transfer between categories of entities and sources of information.

The site will be designed in a way that allows the data on individual units, companies, energy auditors, installers and designers to be added to the map of the region, whose addresses and a brief description of the activity will be in the general database of entities. In addition, the mapping will cover all good practices analyzed as part of the project implementation.

As the entity responsible for the implementation of this action, we will also be obliged to constantly promote the created website and update and expand the data resources contained therein.

The monitoring and administration of the website will also be a constant task. Both in terms of content and technology (technical assistance issues).

The platform will be a public source of information about entities related to the renewable energy sector. At the same time, it will not be a closed "compilation", which will not reward any companies located on it.

Entities involved in the implementation of the action

Responsible: Investor and Entrepreneur Service Center within the Marshal's Office of the Świętokrzyskie Voivodship. Partners: A group of stakeholders was created as part of a project composed of entrepreneurs from the renewable energy sector, business environment institutions, units and universities from the region, as well as representatives of the local government units.

Timeframe

2019-2020 the service will also be maintained after the end of the project

The costs of implementing the action

The cost of designing and implementing the platform will be covered within the internal MOSR resources (from the funds of the Świętokrzyskie ROP).

Estimated total cost of this Action is: 4 500.00 PLN (approximatelly 1 000.00 Euro).

Estimated total cost of this rection is 1 200,001 E	t (approximately 2 000)00 Euroy.
the cost of technical assistance	2 000,00 PLN / 466 EUR
the cost of designing and launching a website subpage	2 500,00 PLN / 582 EUR
total cost	4 500,00 PLN / 1 047,00 EUR







Action no. 3 Change in the management of the ROP policy instrument concerning the optimization of project selection criteria under measure 3.1 supporting the RES solutions

Aim of the action: Change in the management of the ROP policy instrument concerning the optimization of project selection criteria under measure 3.1 supporting the RES solutions. The solutions will primarily concern the increase of the importance of solutions based on photovoltaics in which the public sector and local government units are beneficiaries. In addition, there will be proposed provisions increasing the significance of projects accumulating various types of RES solutions.

Justification for the implementation of the action: as shown by the analysis of good practices within the project, photovoltaic solutions dominate among the partners. In addition, in the Świętokrzyskie region, projects accumulating many solutions and types of RES are not as popular as in the case of other partners. The application of the most effective solutions in the field of electricity production from RES will contribute to the overall increase in the share of energy production from this type of sources and will increase the effectiveness of the ROP's influence on the development of such solutions.

Basic information

It should be highlighted that the Managing Authority of ROP 2014-2020, ie the Board of the Świętokrzyskie Voivodship, conducted a renegotiation of the operational program with the European Commission. Previous experience in the implementation of ROP 2014-2020, as well as experience and lessons learned during the implementation of the ENERSELVES project were the basis for proposing the European Commission reallocation of funds from the European Regional Development Fund, ie EUR 7 432 625.26 from priority axis 4. Natural heritage and cultural to priority axis 3. Effective and green energy, ie to PI 4c Supporting energy efficiency of intelligent energy management and the use of renewable energy sources in public infrastructure, including public buildings and the housing sector. In connection with the above, the allocation funds have been moved, which increased to 58.831 890.26 euros. These funds will be entirely allocated to projects which already were selected to co-financing related to deep energy modernization of public buildings in 2019.

Measure 3.1 within the ROP concerns generation and distribution of energy from renewable sources. The specific objective of the measure is the increased share of energy produced from RES in the total energy production in the Świętokrzyskie Province.

Types of projects that can be co-financed under this measure are primarily:

- construction, reconstruction and modernization (including purchase of equipment) of infrastructure used to generate electricity and / or heat, coming from all renewable sources (hydropower, wind, solar, geothermal, aerothermal, biogas, biomass) with the possibility of connecting to the distribution / transmission network.
- construction or modernization of power and heat generating units in high-efficiency cogeneration from RES with the option of connection to the distribution / transmission network.







- construction or modernization of electricity, heat and cooling generating units in RES trigeneration, aimed at reducing the cost and amount of primary energy necessary to produce each of these forms of energy separately with the option of connecting to a distribution / transmission network.
- construction and assembly of an installation for the production of biocomponents and biofuels (second and third generation).

Beneficiaries of projects may include, among others: local government units, SME sector, universities, cultural institutions.

However, the project limits apply to this action. They mainly result from the guidelines on the eligibility of expenditure under the ERDF, ESF and Cohesion Fund for 2014-2020 and from the Commission Regulations (EU) in this regard. Restrictions boil down to, among others, the required level of energy efficiency gains for new installations or the determination of minimum levels of power obtained depending on the renewable energy sources obtained under projects.

Within the framework of the measure, it is also possible to implement the project in the form of the so-called "Umbrella project" - In this type of projects the Applicant / Beneficiary can only be a local government unit (unions and associations). The Beneficiary's tasks include: selecting transparently, non-discriminating final recipients of support, preparation, commissioning and coordination of the implementation of RES micro-installations, maintaining the durability of the project. Projects of this type support the distribution of renewable energy installations among private individuals.

Experience acquired through the implementation of the project

As part of the ENERSELVES project, based on the experience resulting from study visits from project partners. Primarily:

- in Sweden where the opportunity was presented to combine several renewable technologies to increase the efficiency of the installation. This is important in the context of climatic issues in the northern regions of Europe where greater diversification of energy sources is necessary.
- in Malta where the use of photovoltaic systems is common, not only in public buildings, but also in the private sector, which is mainly the result of a clear and simplified system of investment support. MO SR will streamline the process of assessing grant applications as part of the ROP WS program. The modified assessment grid allowed the authorities responsible for regional policy to optimize the

Direct results resulting from the knowledge gained under ENERSELVES: photovoltaic solutions dominate among partners. In the Świętokrzyskie region, projects gathering many solutions and types of RES are not as popular as in the case of other partners. The application of the most effective solutions in the field of electricity production from RES will contribute to the general increase in the share of energy production from such sources and will increase the effectiveness of the RPO's influence on the development of such solutions.

General conclusions on good practices under the ENERSELVES project show that most projects:

application assessment process under measure 3.1 supporting renewable energy solutions.

- they were implemented in public buildings by public entities;
- related to installation of solar cells (over 53% of all good practices);
- they did not focus on the implementation of a single renewable energy solution, but a number of supporting solutions, eg: thermo-modernization with solar installations, etc.

Especially the last point indicates a tendency that is visible among all project partners. The accumulation of different types of renewable energy solutions under one practice is a path that should be supported also in the Świętokrzyskie region. All the more so because according to the analysis of good practices, this is not a commonly used solution in our region.

The above thesis is confirmed, among others, by an example presented by a partner from Sweden. During a study visit, he presented a senior home in Ostgarden, managed by a municipal company. The







entire complex consists of several buildings on the roofs of which one of Sweden's largest solar cell system with an area of 1316 m2 is installed.

On the other hand, public policy instruments should be adapted to the long-term 2050 goal of reducing greenhouse gas emissions in the EU by 80-95% compared to 1990.

Detailed information about the action

The basis for implementing the indicated action was the relocation of funds allocated for renewable energy projects under the ROP. The allocation funds have been moved, which increased to 58.831 890.26 euros. These funds will be entirely allocated to projects related to deep energy modernization of public buildings since 2019.

The first step in the implementation of this measure will be a change in the ROP management consisting in: formulating of proposals evaluation grid under measure 3.1 under ROP, which will optimize and focus on projects increasing the importance of solutions based on photovoltaics in which public sector units are the beneficiaries. In addition, there will be proposed provisions increasing the significance of projects accumulating various types of renewable energy solutions.

The point criteria currently in force under the ROP 3.1 measure for the assessment of applications relate, inter alia, to:

- effectiveness assessment of co-financing, expressed by the ratio of EU funds allocated to obtain 1 MWh of energy or 1 MW of installed capacity of devices generating energy from RES.
- assessment of the amount of reduction of CO2 to air in relation to the co-financing received. (Mg / year / PLN).
- assessment of the predictable volume of energy production during the year from RES (MW / year).
- and other additional ecological effects of the implementation of the project as well as its compliance with the regulations on protected areas of "NATURA 2000".

In connection with the above, on the basis of experience resulting from the recruitment and competitions already carried out under measure 3.1 and knowledge gained in the implementation of the ENERSELVES project, a project evaluation grid will be prepared, which will then be presented to the Monitoring Committee of the ROP for 2014-2020. This is to optimize project evaluation criteria based on the assumptions described above in this activity.

Entities involved in the implementation of the action

Marshal Office of Świętokrzyskie Region. MOSR as the MA has the opportunity and power to decide about changing the allocation of funds under the regional ROP. It has also a possibility of indirectly influencing the assessment criteria and the ROP framework.

Timeframe

The current financial period (2019-2020)

The costs of implementing the action

The costs of this action will be incurred as part of the ongoing activities of the Marshal's Office of the Świętokrzyskie Voivodeship referring to the Regional Operational Programme for Świętokrzyskie Region 2014-2020.







The average cost of organizing the Monitoring Committee				
The minimum total cost of organizing the meeting	2 550,00 PLN / 594,00 EUR			
The maximum cost of the total organization of the meeting	5 000,00 PLN / 1 164,00 EUR			
Average total cost	3 775,00 PLN / 879,00 EUR			







Action No. 4 Establishment of a supporting tool that will enable proper development of RES policy in buildings under the ROP policy instrument

Objective of the action: Improvement of the policy instrument, ie the Regional Operational Program of the Świętokrzyskie Voivodship for the years 2014-2020, by creating a tool that will enable proper shaping of RES policy in buildings.

Justification for the implementation of the action: After the end of the first phase of the project, its schedule does not provide for meetings of the local stakeholder group. The experience acquired as a result of the ENERSELVES project indicates that during the above-mentioned meetings in the group of experts in the field of renewable energy sources, their participants are able to effectively indicate the region's problems in terms of energy efficiency and propose specific solutions that help regional authorities to create the right policy in the field of renewable energy.

Basic information

According to the provisions of the "Strategy for Research and Innovation (RIS3)" which is an inseparable element of the ROP policy instrument that has an impact on the creation of, for example, project selection criteria, for the Świętokrzyskie region, the smart specializations of the region that directly relate to the objectives of the ENERSELVES project are sustainable energy development and resource-efficient construction industry. In order to optimize activities related to the concept of smart specialization development in the Świętokrzyskie region, it was necessary to select priority target groups within the areas of smart specializations. For this purpose, the Regional Policy Department announced the Competition for the selection of consortia for the development of smart specializations of the Świętokrzyskie Voivodeship, in which for each of the seven smart specializations a priority target group was chosen - Consortium - gathered independent entities operating in the area of the given smart specialization of the Świętokrzyskie Region. The key task entrusted to Consortia is to implement the concept of developing smart specializations.

Consortia are represented by Coordinators, they gather independent entities from business, scientific and business environments operating in the area of a given smart specialization of the Świętokrzyskie Voivodship. There were 7 Coordinators selected - one for each of the smart specializations. They act as a forum for exchange of experiences and provide knowledge in the area.

Another important element of this action is the detailing document of smart specializations of the Świętokrzyskie Voivodeship, which is a set of information defining the goals, directions of development and sub-areas of intelligent specializations of the Świętokrzyskie region. The document is the basis for determining the scope of a given industry and is part of the RIS3 Executive Plan - the development of the plan is one of the ex-ante conditions under the Regional Operational Program for the Świętokrzyskie Voivodeship for 2014-2020.

In addition, document is an aid in assessing the criterion of compliance of projects with smart specializations under ROP.







Experience acquired through the implementation of the project

On the basis of ENERSELVES experience, knowledge gained on the necessity of continuous education and practical approach to issues related to energy self-sufficiency, it is necessary to promote expert meetings in this field and to promote projects that best fulfill the objectives of the ENERSELVES project. As part of good practices provided by a partner from Sweden, the BIOENAREA project was presented, which promotes the exchange and transfer of experience between its partners in order to increase their ability to disseminate and optimize the use of bioenergy. Such solutions as elements of good practice were passed on at a meeting of local stakeholders, where the importance of dissemination of knowledge and continuation of discussions on current trends in the field of renewable energy sources and better policy making in this area were also pointed out.

Detailed information about the action

Currently, inside the region there is carried out by the Marshal's Office of the Świętokrzyskie Voivodeship "the process of entrepreneurial discovery" with the help of consortia for smart specializations in the areas assigned to them. As part of the activities carried out, the consortium coordinators provide permanent cooperation between the local government side, and the science and business sector, and identify the desired directions for public funds to invest in innovative projects. Therefore, it is proposed to create a supporting tool that will enable proper development of RES policy in buildings as part of the ROP policy instrument. The tool will allow for the exchange of knowledge on the energy self-sufficiency of buildings. This activity will help in proper shaping of policies in the field of energy self-sufficiency of buildings and will be included as part of the tasks under the Consortium's activities for the development of smart specializations of the Świętokrzyskie Region as early as in 2019 and 2020.

It is also necessary to analyze the provisions concerns to "Detailing the smart specializations of the Świętokrzyskie Voivodeship", which is a document defining the development industries of the region, in terms of the possibility to take into account solutions developed during the implementation of the ENERSELVES project.

The activities carried out by Consortia for the development of smart specializations of the Świętokrzyskie Voivodeship responsible for the development of the sustainable energy development and resource-efficient construction industry as well as the provisions of the document entitled "The detailing document of smart specializations of the Świętokrzyskie Voivodeship" will be monitored. The above analysis results not only from international partner meetings and meetings of the local stakeholder group, but also based on the document self-assessing the region in terms of energy self-sufficiency of buildings.

Entities involved in the implementation of the action

Consortium members for the development of smart specializations of the Świętokrzyskie Region responsible for the development of the sustainable energy development and resource-efficient construction industry.

Timeframe

The planned date of implementation is from 2019 to 2020.







The costs of implementing the action

The costs of this action will be incurred as part of the ongoing activities of the Marshal's Office of the Świętokrzyskie Voivodeship related to the RIS3 monitoring process in the region.

The cost of creating tool, including within the	40 000,00 PLN, approximately 9 300 Euro per year
organization of the Świętokrzyska Innovation Council	
and the remuneration of experts	
The cost of creating a tool as part of the work of	25 000,00 PLN, approximately 5 800 Euro per year
Consortia for Intelligent Specializations of the	
Świętokrzyskie Voivodeship	

Monitoring of the implementation of all activities

The Marshal Office of the Świętokrzyskie Voivodship will prepare information about the state of implementation of all activities based on qualitative data not less frequently than every six months. Monitoring will be carried out on a continuous basis, based on data collected by the Marshal Office.

Date: 24.07.2019

DYREKTOR

Signature:

URZĄD MARSZAŁKOWSKI WOJEWÓDZTWA ŚWIĘTOKRZYSKIEGO

w Kielcach

Stamp of the organisation: Al. IX Wieków Kielc

25-516 Kielce