



HELLENIC REPUBLIC
REGION of EPIRUS

Transition to renewable energy in Epirus

**Action needed to enhance the performance
and impact of the Structural Funds**

This policy brief is a deliverable of
APPROVE - an Interreg Europe Low-carbon economy project

APPROVE
Interreg Europe



European Union
European Regional
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Key points

- › **The era of e-mobility is already here** and the Region of Epirus must hasten its pace implementing strategies, that encompass extensive charging infrastructure, to face this novel reality. Charging points based on RES technologies are an essential part of this strategy.
- › **Livestock capital is a major asset for the Region of Epirus**, thus ways to improve its sustainability are needed. Livestock waste treatment is expected to have a two-fold benefit, i.e. production and re-use of energy and protection of the environment.
- › Such actions need enhanced acceptability. **The involvement** of the local communities and of all the interested stakeholders **will contribute to the achievement of this goal.**

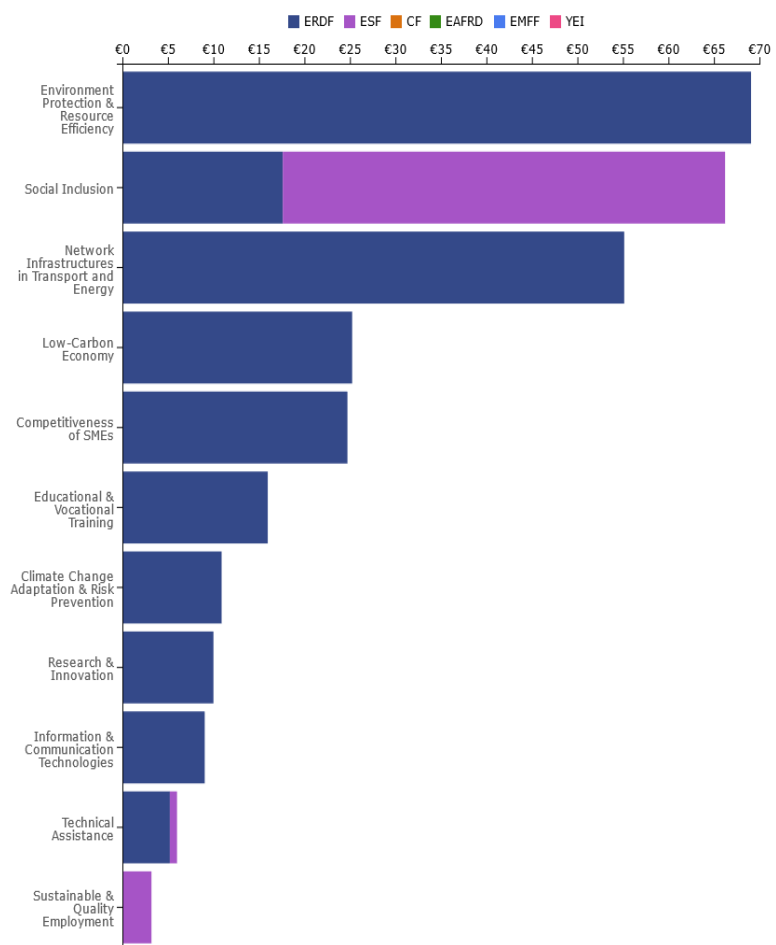
INTRODUCTION

The Region of Epirus used to be one of the most remote and isolated regions of Greece. However, thanks to the construction of infrastructure projects, i.e. the Egnatia and Ionian Highways, the Region came out of such isolation and is taking progressive steps towards development in all sectors. One of the most important challenges the Region of Epirus has to deal with is the promotion of energy efficiency and the use of Renewable Energy Sources (RES), as well as the reduction of greenhouse emissions. Indeed, Epirus is making great efforts in promoting RES. According to the revised Renewable Energy Directive (Directive (EU) 2018/2001) and the national legislation (L. 1630B/2010 and 3851A/2010), the Region of Epirus intends to contribute to EU targets. In particular, the Region set a goal as regards the annual greenhouse emissions reductions, amounting at 3.631 CO₂eq tons. The reference year is 2012 and the target is to be reached by 2023. The calculation of this target was made by the General Secretariat of the Ministry of Energy based on the methodology used in the annual report for climate change to the UN (Annual Inventory Submission under the Convention and the Kyoto Protocol for greenhouse and other gases).

The Regional Operational Programme (ROP) Epirus 2014-2020 foresees Specific Objectives and Actions dedicated to the protection of the environment with a considerably high budget allocated, as shown in the chart below. The potential of such significant financial support from Structural Funds is not fully exploited yet because of the modest progress in the implementation of the ROP.

Changes in the ROP's implementation to improve its effectiveness and funds absorption are still possible, and other improvements can be done in the development of the ROP 2021-2027. This is where the participation of the Region in the Interreg Europe APPROVE project will contribute significantly.

SIF 2014-2020: Total Budget by Theme (daily update): Epirus - ERDF/ESF, EUR billion



Source: <https://cohesiondata.ec.europa.eu/programmes/2014/GRI6M2OP004>

Through interregional cooperation and the involvement of regional stakeholder groups, the four APPROVE partners' regional authorities (Regional Council of Lapland, Region of Epirus, Normandy Regional Council, EREN - Regional public energy entity of Castilla y León), supported by the Italian advisory partner Poliedra, have shared and transferred experiences and knowledge to improve their policies for the promotion of RES. As an end goal, the lessons learnt from the

interregional cooperation have been used by each regional authority to define an action plan focused on the improvement of their Structural Funds Operational Programme in terms of RES use and development, considering investment priorities related to TO4 "Supporting the shift towards a low-carbon economy in all sectors". The next phase of the project, which will end in November 2022, will see the implementation of the regional action plans and their monitoring and assessment.

Table 6.10. Indicators for the Regional Operational Programs of the region of Epirus

Indicator	Regional indicator						
	Level of Commitments (Public expenditure)	National Rank	National average = 100	Share of ROP contracted	NA='100' (rank)	Share of ROP implemented	NA='100' (rank)
ROP total budget. (Public expenditure) (€), 2014-2020	295,504,762	7	5.59 ^a	84.4	97 (8)	44.8	102 (5)
% ROP in research and technology	6.4	2	144	63.2	137 (4)	13.1	100 (4)
% ROP in entrepreneurship	8.4	5	103	92.1	59 (10)	34.3	92 (7)
% ROP in human capital and social care	28.9	12	77	123.8	118 (2)	71.2	124 (2)
% ROP in environment	35.6	6	115	71.5	117 (3)	47.2	139 (2)
% ROP in transport	18.7	4	109	54.9	69 (10)	14.9	34 (12)
% ROP in technical support	2.0	7	98	59.2	108 (4)	46.1	134 (3)

Note: a: the value is the national share of the region.

Source: Ministry of Development and Investments (3 December 2020).

Source: <https://cohesiondata.ec.europa.eu/programmes/2014GR16M2OP004>

EPIRUS' APPROVE REGIONAL ACTION PLAN

The Action Plan developed by the Region of Epirus in the framework of APPROVE identifies actions that are the result of a process of exchange of experiences and know-how among the project partners and collaboration with regional stakeholders. The project team of the Region of

Epirus, after studying and evaluating the good practices individuated by the other partners, drew valuable inspiration and came up with the proposal of two actions, which can concern the ROP Epirus 2014-2020 and ROP Epirus 2021-2027 respectively.

› Action 1

MODIFICATION OF CALL 81 OF THE ROP 2014-2020 IN ORDER TO INCREASE THE INSTALLATION OF PHOTOVOLTAIC PANELS AND INTEGRATE THEM WITH THE REALISATION OF E-CHARGERS

Call 81 of the current ROP “Interventions that contribute to the energy efficiency of urban transports and centers” was modified (second modification) in order to increase the installation of PV panels and to integrate them with the setting up of e-chargers. The modification also aims at a bigger percentage of funds absorption without changing the budget (12.217.735 €). The Call modifications include the following additional requirements:

- › **Construction of open parking spaces:** We expanded this measure by the requirement of adding shades covered with PV panels with batteries that will collect solar energy and supply e-charging points that will cover the charging needs of e-cars exclusively by solar panels.
- › **Smart lighting with PV panels:** We further expanded this measure by requiring the installation of batteries and the provision of the energy not used for lighting to e-cars charging points.
- › **Installation of PV panels to public buildings:** We further expanded this grid by providing some of this energy to e-cars’ charging points and not only to public buildings. The PV panels will provide the necessary power for the charging points to be self-sufficient, to operate in an autonomous and independent way, without the need of conventional energy from the Power Production Company (PPC).



Action 1 was partly inspired by a Spanish good practice pointed out by the APPROVE advisory partner Poliedra, who had known about it from the Interreg Europe project **PROMETEUS: Sustainable electric chargers stations**, which was the first case of solar charging station for electric vehicles installed in Segovia.

Also, The Castilla y Leon electromobility guide was a good source of inspiration since it provides people, automotive industries or other stakeholders such as public administrations, with information regarding e-mobility, and it helps authorities to establish policies and regulatory measures in order to foster the use of this sort of vehicles.

More information:

www.interregeurope.eu/policylearning/good-practices/item/1960/sustainable-electric-charging-stations/

www.interregeurope.eu/policylearning/good-practices/item/1711/the-castilla-y-leon-electromobility-guide/

This second modification of Call 81 will highlight the new ideas on the way we construct open space parking areas, city lighting and public buildings considering their energy consumption balance. Additionally, it will place a particular focus on the way we use solar panels to provide electricity to the charging points in the cities. In other words, we will show the advantages of combining the construction of charging points in open parking spaces and public buildings with the installation of solar panels.

After the closure of the call, the Region of Epirus will organise a workshop targeted to the beneficiary municipalities. The workshop will provide indications about how to involve local stakeholders and the citizens in the implementation of the projects, for example in deciding the exact location or characteristics of the PV panels, e-chargers, and so on.

The participation in APPROVE, in fact, has raised the awareness of the Region of Epirus about the fact that involving stakeholders and citizens can significantly improve the quality and effectiveness of the funded projects. This workshop is to be held at beginning of 2022, after the evaluation of the applications.

The Region also plans to hold further four workshops after the implementation of the projects, focusing on the experience gained through this process and the lessons learnt. Through such workshops, potential future beneficiaries will avoid mistakes and delays.

The exchange with the Normandy Region, also in occasion of the site visits of the Liapatis plant in Epirus, inspired to work at the introduction of measures oriented to the promotion of biogas in the development of the next ROP, since it was too late to make such a change in the current ROP.

Besides, livestock waste management is one of the key priorities of the Region of Epirus and the ROP 2021-2027 will offer a great opportunity for the integrated implementation of biogas projects.



› Action 2

DEVELOPMENT OF A SMALL SCALE NETWORK OF BIOGAS PLANTS UNDER THE ROP 2021-2027

Under the Policy Objective 2 “a greener, low-carbon Europe by promoting clean and fair energy transition, green and blue investment, the circular economy, climate adaptation and risk prevention and management” of the Regional Operational Programme 2021-2027, the Region of Epirus intends to implement actions “Providing incentives to increase the environmental performance of agencies (public /private) by creating appropriate conditions for the integration of the environmental dimension in their operation (eg small scale RES projects, etc.)”.

In this framework, it will be possible to fund a small number of **biogas plants** which will receive and manage the waste of local poultry livestock and poultry farming. In this way we will avoid the uncontrolled disposal of **livestock waste** and we will respond to environmental and human health challenges of industrial livestock and poultry farming. The benefits of this action are multifold, as it will have economic, environmental and social positive impact; specifically, the objectives of this investment will be to:

- › manage waste, produce energy and sell it to the PPC
- › benefit the environment and especially the Pamvotida Lake as it will be free of farming waste
- › raise awareness among the local population concerning the benefits of a sound management of farming waste
- › provide distant heating to the communities where these plants will be located
- › produce fertilizer as a product of the livestock management which will be used in agriculture.

POLICY RECOMMENDATIONS

Based on our learnings in the APPROVE project, the following recommendations can be formulated to local policy makers and stakeholders in order to promote renewable energy and its acceptance.

#1 Strengthening cooperation among all relevant players

#2 Fostering communication and information on the benefits of RES in the Region of Epirus and the importance of the objectives, actions, results and opportunities offered by the policy instruments and used by the Region

#3

Enhancing experience exchanges with other European Regions and promoting their essential role for the improvement of policy instruments

#4

Highlighting and further promoting among the citizens, local administrations and economic operators the financial, social and environmental benefits of the use of RES and the need to protect the environment and improve its conditions

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