

FINANCING CLIMATE ACTION IN MUNICIPALITIES

OPTIONS FOR FINANCING CLIMATE ACTION IN
SMALL AND MEDIUM MUNICIPALITIES
IN GREECE

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The information and views set out in this study are those of the author(s) and do not necessarily reflect the official opinion of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

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Executive summary

Context

The clean energy transition has been recognised as one of the primary targets to tackle climate change by both the EU level and the Greek government. Moreover, an important opportunity for the democratisation of energy planning and creation of sustainable jobs arises in the energy sector. Municipal and regional authorities play a crucial role in making this transition happen, as they are spatial and administrative units with a large potential of initiatives and consequent results, in terms of planning and implementation of energy efficiency and renewable energy sources (RES) projects. They can build upon their institutional structure, the existing favourable legislation, as well as reliance between citizens and local stakeholders and at the same time, benefit the environment, while strengthening entrepreneurship.

Objectives

The “Funding options for municipalities for energy and climate-related actions in Greece” report has been produced in the framework of the EUKI funded project *Bridging European and Local Climate Action (BEACON)* and aims at providing a guide of available financial tools, instruments and mechanisms that can be utilised by the municipalities in Greece for planning and implementing local climate action measures including plans mentioned under the National Energy and Climate Plan (NECP).

The analysis has been performed during the period of March 2021 until May 2021, and includes data and information of the available financial resources, funds and tools related to climate actions design and implementation by small and medium sized municipalities with 13.000-80.000 inhabitants in Greece.

Methodology

A short questionnaire was distributed to the representatives of all municipalities participating in BEACON project and to seven additional municipalities that met the criteria of the research. The content of the questionnaire included questions about the available resources of the municipalities at national and European level, and the obstacles they face in finding or using the financial tools.

Moreover, a secondary research has been performed over the available digital material related to the objective of the analysis. The results are divided into three main categories including funds and mechanisms targeting to the mitigation activities, adaptation activities as well as both mitigation and adaptation activities, including available funding for planning (technical assistance), project development and informational and awareness raising campaigns. Furthermore, the results are categorised into the following priorities: governance (e.g. climate strategy development), power production, heating and cooling (energy efficiency, RES power production, RES heating/cooling), sustainable mobility and transport (mobility strategy, e-mobility, public transportation, cycling & walking, intermodality, municipal mobility management), sustainable urban planning, and waste management.

At the current period of time, in both national and European level, the programming period 2021-2027 is planned and designed. Actions concerning climate change are foreseen in NSRF (Corporate Development Framework Agreement) and in European framework programmes such as Horizon Europe and LIFE. Moreover, the “Next

Generation EU” fund, includes a national plan for recovery and sustainability and specifically the first pillar, named “Green Transition” involves actions to avoid or mitigate climate change.

All the existing funding tools, schemes and mechanisms funded by national and European resources, together with the financial products related to the objective of this analysis were mapped and presented in this report.

1 Introduction

1.1 Purpose of the study

To mitigate climate change, the transition to clean forms of energy is a necessity, recognised at European and national levels. This transition is also a major opportunity to democratise energy planning while creating sustainable jobs in the energy sector. Municipal and regional authorities are called on to respond to the demand for energy transition because they are spatial and administrative units with the potential to develop initiatives and achieve results in planning and implementing projects to improve energy efficiency and install renewable energy sources (RES) systems. These authorities can make the best use of their institutional structure, the current favourable legislation, and the relationship of trust they have built with citizens, local stakeholders and entrepreneurs to benefit the environment while enhancing entrepreneurship.

This study aims to guide municipalities in finding available financing instruments for implementing energy and climate action. The primary focus for municipalities is on using alternative and sustainable forms of energy, driven by environmental conservation and reducing their energy footprint. The main areas of action are:

- Energy saving
- RES use
- Waste management
- Sustainable transport (e-mobility, etc.)
- Sustainable urban planning

The study was conducted from March to May 2021 and involved municipalities across Greece with a population of 13,000 to 80,000.

1.2 Study methodology

To draft this guide, a short survey was developed and distributed by CRES to staff of 11 municipalities indicative of the country, including the municipalities participating in the BEACON project. The survey included questions about the resources available to municipalities on the national level and the European level, as well as the problems they are faced with in finding and using funding instruments (the questionnaire of the survey is presented in

The CRES team evaluated, grouped, and included the survey results in this study. Survey outcomes related to the various funding sources were incorporated in section 3 and the results related to the challenges the municipalities face have been elaborated in section 4 of this study. Moreover, CRES reviewed and processed published data, mostly web-based, and included relevant information in the study.

The funding sources and instruments that can be used by municipal authorities were categorised, taking into account the respective funding body. For this study, **European sources** are those where the funds or resources are managed centrally by European institutions, whereas **national sources** are the ones managed on a national or regional level.

The analysis presented in this study includes the available funding opportunities that have one of the following priorities:

2 Needs of small and medium-sized municipalities in financing local climate protection measures

In order to assess the needs of Greek municipalities, a questionnaire was developed. This was distributed to the 5 BEACON municipalities (Agios Dimitrios, Dorida, Farsala, Kalamata, and Syros-Ermoupolis as well as to the municipalities of Agioi Anargyroi-Kamatero and Vari-Voula-Vouliagmeni. The structure of the questionnaire is presented at chapter 2.1. Answers came from five Municipalities of which four belong to BEACON municipalities.

2.1 Questionnaire concerning municipal financing possibilities for energy and climate actions

- What are the funding needs for energy and climate actions (mitigation and adaptation) (annual amount)?
- What are the national funding sources used by your municipality for energy and climate actions (reference to projects)?
 - Governance (e.g. development of a climate strategy)
 - Generation of energy
 - Heating and cooling (energy efficiency, RES)
 - Sustainable mobility and transport
 - Sustainable urban planning
 - Waste management
- What are the European and/or internal funding sources used by your municipality for environmental protection actions (reference to projects)?
 - Governance (e.g. development of a climate strategy)
 - Generation of energy
 - Heating and cooling (energy efficiency, RES)
 - Sustainable mobility and transport
 - Sustainable urban planning
 - Waste management
- Alternative sources of funding (e.g. crowd funding)
- What obstacles do you encounter in finding sources for:
 - Funding of projects and studies?
 - Project financing?
 - Funding of energy and climate information and awareness actions?
- What percentage have you used from EU or national funds (for ongoing projects)?

The results of the survey are presented following:

2.2 Funding needs for energy and climate actions (mitigation and adaptation)

Based on the findings of the survey, the funding needs recognized by the BEACON municipalities refer to the energy and climate projects in sectors already recognized as priorities at local level and are included in the local sustainable energy and climate action plans. These projects are mostly focused on reducing energy demand such as improving energy efficiency in lighting systems, in municipal buildings and infrastructure and establishing energy management systems (ISO 50001:2015); Sustainable mobility and transport is proven a common priority for the small and medium sized municipalities located in the mainland as well as power generation from roof mounted PV systems.

2.3 Funding sources used by the municipalities

The survey participants were asked about the funding sources they used so far and for which types of projects. The input received indicates that the municipalities are familiar with most of the available national funding sources, which they exploit at high extent, while the utilization of European resources is rather limited. Lack of knowledge and usage of alternative funding sources and schemes (i.e. crowdfunding) was also a common answer. Furthermore, receiving loans from commercial banks as well as from the Consignment Deposits and Loans Fund in order to implement energy and climate projects, is a common practice according to the survey's findings. Own funding is limited and refers to activities related to energy and climate information and awareness actions.

The main funding sources utilized by the municipalities are the following:

- National programme "Antonis Tritsis" (see details in section 3.1.3)
- National programme "Philodimos" (see details in section 3.1.4)
- Green fund (see details in section 3.1.6)
- EU Framework Programme for Research and Innovation
- Horizon 2020 (active during the period 2014-2020)
- European LIFE programme (see details in section 3.2.2)
- Consignment Deposits and Loans Fund (see details in section 3.4.1)

The above mentioned funding sources have been included in the chapter 3 of this study.

2.4 Obstacles by municipalities encountered in finding sources for funding

There are several areas where the municipalities face shortcomings according to the surveys participants and can be summarised as follows:

- Limited capacity in terms of human resources, thus there is limited available time for collecting information on new funding sources due to work overload.
- Lack of knowledge of the typical municipal staff on energy and climate technologies, leading to insufficient and poor results when drafting and submitting project proposals in order to be financed by European sources.

- Inadequate administrative capacity and technical expertise.
- Budgetary and regulatory constraints
- Bureaucracy and legal fragmentation

The challenges that small and medium sized municipalities face when searching out and utilizing various funding sources are presented in chapter 4 of this study.

3 Sources of funding for municipal authorities to implement energy and climate actions

This study was elaborated from March to May 2021, which was during the transitional period between the 2014-2020 and 2021-2027 programme periods, thus detailed information in few cases of funding programmes presented in the next sections is not available. The financing instruments for local climate action in small and medium-sized municipalities presented in the next sections include information about the objectives, the eligible type of actions and the available budget. A detailed list of the available funding as well as the calls for projects proposal for the actions within the scope of this study are presented in detail in Annex 1.

3.1 National sources of funding

This section presents the main national financial sources and resources that municipal authorities can use to plan and implement climate and energy actions. First, it discusses the planning provisions of the Partnership Agreement for the Development Framework 2021-2027 (PA 2021-2027) and the National Recovery and Resilience Plan. It then describes ongoing programmes and financial instruments.

3.1.1 Partnership Agreement for the Development Framework 2021-2027

The PA¹ is the main strategic plan for the country's development and is supported by the EU's European Structural and Investment Funds (ESIF). The development planning of the new PA and its programmes is in progress, being gradually implemented through circulars issued and drafts submitted to the European Commission; these documents are prepared by the Greek Ministry of Development and Investment via the Special Unit for Strategy, Planning and Evaluation (EYSSA) of the PA National Coordination Authority.

The first draft of the PA 2021-2027 was completed in December 2020. The programmes for 2021-2027 are being designed upon issuance of the second circular.

The new PA includes the following sectoral and territorial operational programmes (OPs), which are at the consultation on concept papers stage; following the lists are more information on those programmes serving the purposes of this study.

Sectoral programmes

- Environment – Energy – Climate Change
- Transport Infrastructure
- Competitiveness, Entrepreneurship and Innovation
- Human Resources Development, Education and Lifelong Learning
- Civil Protection
- Digital Transformation

¹ <https://www.espa.gr/el/Pages/newproperiod21-27.aspx>

Regional programmes

- OP Epirus
- OP North Aegean
- OP Ionian Islands
- OP Peloponnese
- OP Crete
- OP Western Macedonia
- OP South Aegean
- OP Eastern Macedonia and Thrace
- OP Central Greece (Sterea Ellada)

Territorial cooperation programmes

- Greece – Italy
- Greece – Albania
- Greece – North Macedonia
- Greece – Bulgaria

Pursuant to the publicized **PA 2021-2027**, the specific policy objective (PO) selected by the Greek State, is PO 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**, which includes the priorities related to the buildings energy efficiency, RES promotion, smart energy networks and the islands' electrical interconnection to the mainland's transmission network as well as their energy transition. Its achievement is expected to come from implementing the following OPs:



Figure 1: OPs to promote a greener, low-carbon Europe

The Cohesion Fund will typically finance the interventions of national scale, strategic importance, or interregional nature. The European Regional Development Fund (ERDF) will finance all other interventions, mostly of regional scale.

Among the regional programmes, the following will be mostly funded:

- Wastewater treatment and sewerage interventions
- Access to freshwater, sustainable water management
- Green infrastructure for solid waste management
- Small-scale flood defence works
- Local energy storage projects
- Projects related to energy efficiency in public buildings

Sectoral programmes will finance activities of national or strategic importance, including:

- Risk management and biodiversity
- Projects related to energy efficiency in residential buildings
- Procurement of civil protection equipment
- Targeted flood defence projects
- Activities related to raising awareness and training of human resources as well as other horizontal projects

For interventions promoting **sustainable multimodal urban mobility**, the sectoral programme for transport will focus on funding for projects in fixed-trajectory modes.

The **Just Transition Fund**² focuses on the provision of the necessary resources for projects linked to the just transition of the areas **most dependent on the use of conventional fuel—specifically the Regions of West Macedonia, North and South Aegean and Crete, and the Municipality of Megalopoli**—and that are associated with the energy sector, protection and restoration of ecosystems, and the environment.

Representatives of the local and regional authorities may participate at different stages of design and public consultation through their representative bodies (Central Union of Greek Municipalities, or KEDE).

² <https://www.sdam.gr/index.php/>

3.1.2 Next Generation EU – Greece 2.0, National Recovery and Resilience Plan

The National Recovery and Resilience Plan³ consists of four sets of proposals (pillars) involving 18 components per guidelines from the European Commission. Some of its most important and interesting activities (investments and reforms) concerning the scope of this study are found in pillar 1, **Green Transition**, with a total budget of €6.026 million from the Recovery Fund. Pillar 1 is structured in four components:

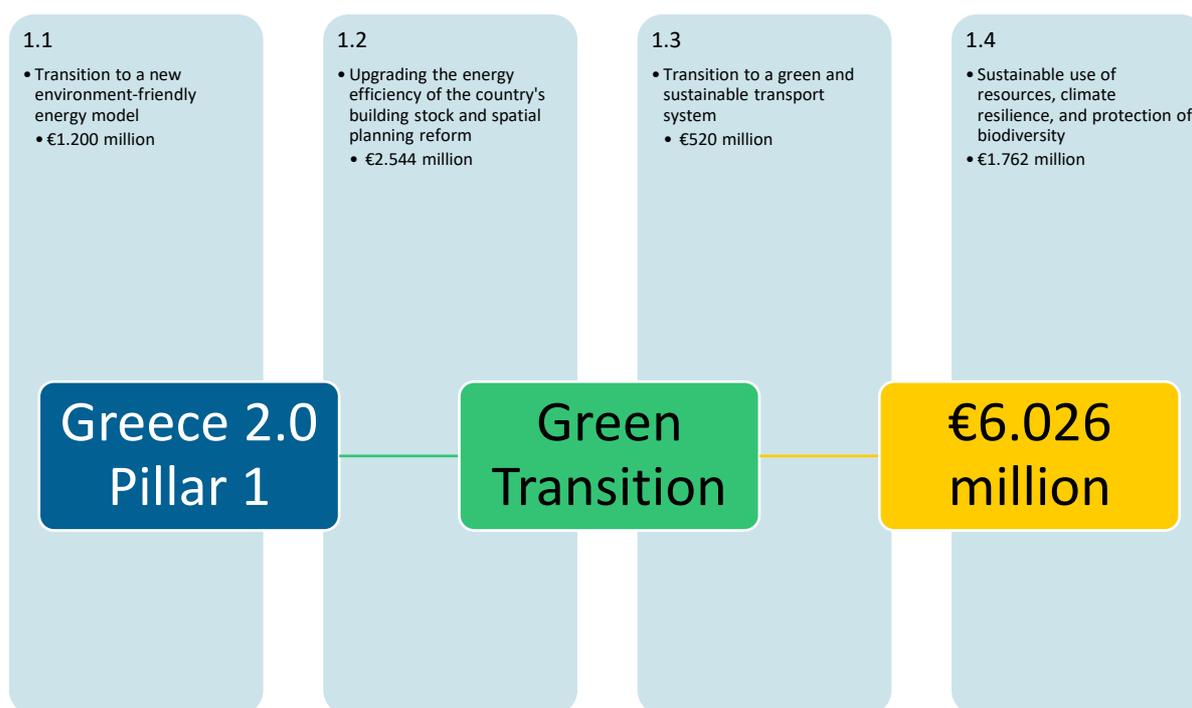


Figure 2: Pillar 1 priority axes of the National Recovery and Resilience Plan, in Greece

The flagship investments included in pillar 1 and indicated in the detailed description of the activities integrated in the National Recovery and Resilience Plan, Greece 2.0, are as follows:⁴

- Energy renovation of residential buildings (€1.081 billion). Includes replacing doors and windows and double-glazing, upgrading of heating and cooling systems, installing solar water heaters, heat pumps, smart energy efficiency systems and PV panels on roofs, etc. An additional €450 million is intended for the Upgrading Energy Efficiency of Buildings for Small and Medium-sized Enterprises (SME) project and €200 million for the respective project in the public sector.
- Electrical energy storage systems (€450 million).
- Electric interconnectivity of islands – Cyclades (€195 million).
- Strategic urban regeneration—e.g. Eleonas, southern seafront of Attica, Thessaloniki, Patras, and elsewhere (€475 million).

³ <https://government.gov.gr/wp-content/uploads/2021/03/Greece-2.0-EL-31032021.pdf>

⁴ <https://government.gov.gr/parousiasi-tou-ethnikou-schediου-anakampsis-ke-anthektikotitas-ellada-2-0/>

- Renovation of the Olympic Athletic Centre of Athens (€43 million).
- Urban plans across Greece (€250 million).
- E-mobility in public transport (€220 million).
- National reforestation plan (€224 million).

3.1.3 Antonis Tritsis – development and solidarity programme for local administration

Description

The new programme of development and solidarity for municipal and regional authorities, associations of municipalities, and local government legal entities, with the symbolic name Antonis Tritsis,⁵ has been submitted to ensure the implementation of a comprehensive strategic plan to develop prospects and social solidarity through local government bodies.

Objectives

- Improve and modernise the main infrastructures of municipal and regional authorities, associations of municipalities, and local government legal entities through sustainable development driven by improving citizens' quality of life and safety.
- Protect public health and boost the local economy by restarting the social and economic life due to the COVID-19 pandemic.
- Carry out activities and initiatives aimed at social cohesion, solidarity, and support for the local government structures providing social services.
- Introduce state-of-the-art technologies, such as Information and Communication Technologies (ICT), in the local administration to transform digital culture.
- Enhance the responsiveness of local administrations by modernising the civil protection institution at the local level.

Detailed instructions on the beneficiaries, eligible projects, and participation requirements are available on the Hellenic Agency for Local Development and Local Government (E.E.T.A.A.) S.A. website [1].⁶

⁵ <https://eyde.ypes.gr/tritsis/>

⁶ https://www.eetaa.gr/fundings/index.php?tag=view_programmata_details&programma_id=89

3.1.4 Philodimos II – special programme for investment loans to municipal and regional authorities, municipal water and sewerage companies (DEYA), and associations of local government bodies

Description

The main goal of the programme is the construction of works and procurement of equipment in the sectors of water supply, sewerage, and flood protection; reparation of damage caused by natural disasters; rehabilitation of uncontrolled waste disposal sites; rural roads reparation; and construction or rehabilitation of municipal buildings.

Objectives

The goal of the Philodimos project is the economic sustainability and fair development of local government bodies all over the country through the construction of works and procurement of equipment in the following infrastructures and sectors:

- Water supply, sewerage
- Uncontrolled waste disposal sites
- Rural roads
- Municipal buildings
- Flood protection
- R Natural disasters

Detailed instructions on the beneficiaries, eligible projects, and participation requirements are available on the Hellenic Agency for Local Development and Local Government (E.E.T.A.A.) S.A. website [1].⁷

3.1.5 OP Transport Infrastructure, Environment and Sustainable Development

Description

The goal of the programme is infrastructure development and modernisation, urban development, and air quality improvement, along with noise reduction, environmental protection, and sustainable mobility promotion by developing environment- and citizen-friendly transport systems (suburban railway, subway, tramway).

Objectives

Relating to transport, the objective is to promote the completion of part of the core Trans-European Transport Network (TEN-T) infrastructure, road and rail, and further develop and improve the transport network. The

⁷ https://www.eetaa.gr/fundings/index.php?tag=view_programmata_details&programma_id=1
https://www.eetaa.gr/fundings/index.php?tag=view_programmata_details&programma_id=2

emphasis on road and rail, as well as interventions on ports and airports, promote combined transportation and modernise the transport system.

Furthermore, this programme provides funding for road connections of trans-European ports and airports between the mainland and islands, development and expansion of urban transportation on a fixed trajectory, other clean modes of surface transportation, and improvement of transportation safety.

Relating to the environment, the objectives are compliance with the requirements in the sectors of waste and water, adaptation to climate change, including risk prevention and management, conservation of natural environment and biodiversity, sustainable urban development, and urban regeneration.

Detailed instructions on the beneficiaries, eligible projects, and participation requirements are available on the Hellenic Agency for Local Development and Local Government (E.E.T.A.A.) S.A. website [1] as well as on the OP website.⁸

3.1.6 Green Fund

Description

The Green Fund⁹ can finance programmes drawn up by the Ministry of Environment, Energy and Climate Change or other ministries and their supervised organisations, decentralised general administrations, local government bodies, legal entities of the wider public sector (as outlined in the provisions of Article 1 of L. 1256/1982), and associations or other types of unions of legal and natural persons that aim, according to their constitutional goals, at protecting, upgrading, and rehabilitating the environment.

Objectives

The financing programme of the Green Fund supports projects aimed at:

- Environmental upgrading of cities
- Achieving economic and social targets
- Funding the environmental impact activities selected in Article 77 of L. 4495/2017, “Control and protection of the Built Environment and other provisions.”

⁸ <https://www.ymeperaa.gr/>

⁹ <https://prasinotameio.gr/>

3.1.7 Further information on financial instruments

Detailed information on the available programmes and call for project proposals from national sources described in the previous sections as well as the eligible projects concerning the Greek municipalities included in the scope of the study can be found in Annex 1. The projects have been codified by thematic area (see Section 1.2) and funded activity, as shown in the following tables:

Table 1 Codification of thematic area

Codification of thematic area	Description
a	Mitigation
b	Mitigation - adaptation
c	Related projects

Table 2 Codification of funded activities

Codification of funded activities	Description
1	Space heating-cooling from RES
2	Electricity production from RES
3	Development of a climate strategy
4	Energy efficiency in buildings and businesses
5	Sustainable mobility and transport

3.1.8 European Economic Area Funding Mechanism 2014-2021 – GR-Energy (Renewable Energy Sources, Energy Efficiency, Energy Security)

The GR-Energy programme of the European Economic Area Funding Mechanism (EEA FM) 2014-2021, thematic area Renewable Energy Sources, Energy Efficiency, Energy Security, is co-financed between the European Economic Area - European Free Trade Association (EA-EFTA)countries (Iceland, Lichtenstein, and Norway) and the Public Investment Programme of the Hellenic Republic (75%/25%)

The aim of the EEA FM 2014-2021 programme/GR-Energy is “less carbon-intensive energy and increased security of supply.” The programme seeks “improved energy efficiency”¹⁰ through the short- and medium-term impact of the above results on stakeholders and target groups. In particular, the programme projects will contribute to the reduction of CO₂ emissions, the overall reduction of energy consumption, the increase of renewable energy production, an increase in jobs, and improved dynamics of local communities.

The programme’s target groups are the users and visitors of public sector buildings and infrastructure. GR-Energy projects will serve as demonstrative projects aiming to increase energy-\ efficient buildings and infrastructure in Greece.

The programme supports innovative solutions to increase production from RES and energy efficiency in the country’s public social infrastructure as a pillar of green development in the context of European and national obligations. It also seeks to alleviate social and economic inequalities and to strengthen the bilateral cooperation of member states in the field of RES and energy efficiency. [3]

Detailed information on the programme is available on the Management Authority website: <http://eeares.cres.gr/index.htm>.

3.2 European sources of funding

This section discusses the European resources available to the local authorities for enhancing the energy transition and restraining climate change. This study was conducted from March to May 2021, the transitional period between the 2014-2020 and 2021-2027 programme periods. Planning and further breakdown into programme pillars and projects, as well as announcement of the relevant calls, are expected during summer 2021.

These resources are managed on the European level, with the goal of supporting the achievement of European priorities.

¹⁰ http://eeares.cres.gr/eng/EEA_GR_Energy_eng.htm

3.2.1 Horizon Europe

Description/goal

Horizon Europe¹¹ is the ninth EU framework programme for research and innovation for the 2021-2027 period, with a budget of €95.5 billion; it is the successor of the eighth framework programme, Horizon 2020, which was for the 2014-2020 period.

It aspires to contribute to strengthening the EU’s scientific and technological base, reshaping the European Research Area, and improving the EU’s innovation capacity.

The programme’s goal is to connect research and innovation with six key European priorities related to tackling climate change, digital transformation of societies and economy, citizens’ prosperity and safety, and protecting the European democracy.

Structure/activities

Horizon Europe is structured in three pillars and also includes horizontal activities (see Figure 1).



* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

Figure 3: Horizon Europe Structure (Source: <http://horizoneurope.gr/>)

¹¹ <http://horizoneurope.gr/>

The **first pillar** concerns reinforcing the excellence of EU's science base and falls outside the scope of this study.

The **second pillar**, Global challenges and European industrial competitiveness, is structured in six clusters:

1. **Health**
2. **Culture, creativity and inclusive society**
3. **Civil security for society**

This cluster refers to the protection of EU and its citizens against the effects of natural and artificial disasters.

4. **Digital technologies, industry and space**

Research and innovation activities in this cluster contribute to developing a circular and clean low-carbon industry, respecting the planetary boundaries, and promoting inclusive development through the creation of high quality jobs and wider participation of society in the use of technologies.

These activities will contribute to addressing the challenges faced by European industry, such as dependence on imported basic technologies and raw material, scarcity of resources including energy, and inconsistency in technology skills.

5. **Climate, energy and mobility**

The goal of the fifth cluster is climate change mitigation while enhancing the competitiveness of the energy and transport sectors and the quality of the services these sectors offer to European society. A prerequisite for such enhancement is a better understanding of the causes, evolution, risks, and effects of climate change, as well as the transition to more sustainable, environment-friendly, resilient, safe, smart, and competitive energy and transport systems.

Activities in this cluster contribute in the technological, economic, and social transformation needed to achieve climate neutrality and ensure a socially just transition, as outlined in the long-term strategy of the European Commission.

The draft working programme for 2021-2022 includes calls for proposals that will be announced. Some of the calls interesting for municipal participation in partnership with other national and European bodies are mentioned in the following:

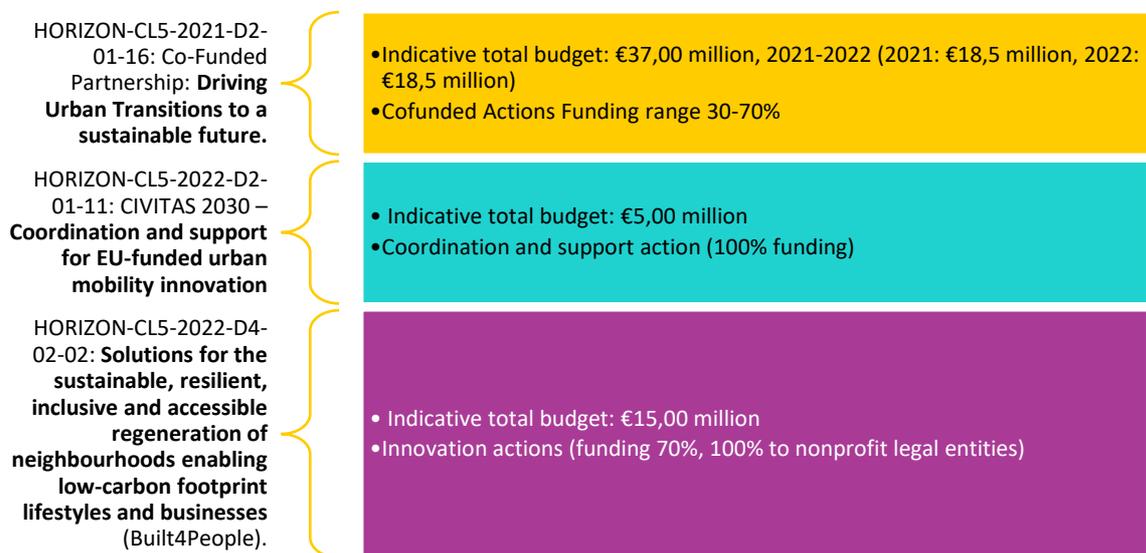


Figure 4: List of call for proposals under the Horizon Europe programme

6. Food, bio-economy, natural resources, agriculture and environment

The goal of this cluster is the transition to a model of effective management of natural resources, such as biodiversity, water, and soils; it falls outside the scope of this study.

Activity tools

The activities under pillar 2 are mostly implemented through collaborative projects (research and innovation activities, innovation activities) via European research and innovation partnerships and through missions, which is a new element of Horizon Europe.

Missions are intended to achieve specific measurable goals within a clearly set timeframe, with a major impact on research, technology, society, and citizens that would be impossible to achieve through separate activities. They serve as an umbrella framework, combining resources from several clusters and activities of the programme. They will also be developing synergies with national initiatives. The maximum suggested budget is €600 million. Five mission boards were set up to implement missions to support the specification of targets, the consultation with member states, the design, and the implementation.

The fourth among the five mission areas is climate neutral and smart cities. This area aims to support and promote 100 European cities in their efforts toward substantive transformation until climate neutrality in 2030, and to turn these cities into innovation hubs, benefiting quality of life and sustainability in Europe. Among others, the scope of the programme includes supporting municipalities in finding funding instruments and resources.

The **third pillar** concerns innovation, and the beneficiaries (businesses, institutions, etc.) are not included in the scope of this study.

3.2.2 LIFE programme 2021-2027

Description/goal

The LIFE programme is the EU's funding instrument for the environment and climate action. It was created in 1992 and has co-financed thousands of projects. The European Commission increased the funding of the LIFE programme by around 60% for the 2021-2027 period.

Structure/activities

The new LIFE programme will be structured in four sub-programmes:

- Nature and biodiversity
- Circular economy and quality of life¹²
- Climate change mitigation and adaptation¹³
- Clean energy transition (new addition)¹⁴

The clean energy transition sub-programme will include five intervention areas:

- Create a national, regional, and local policy framework supporting the clean energy transition
- Speed up technology development, digitisation, new services, and business models and enhance the relevant professional skills in the market
- Attract private funding for sustainable energy
- Support the development of local and regional investment plans
- Participation and empowerment of citizens in the clean energy transition

The details on the regulation, the multiannual work programme, and the related calls for proposals are still under discussion. The calls for proposals for funding were expected to be announced during the second half of 2021. Further information about the LIFE programme is available on the European Climate, Infrastructure and Environment Executive Agency's webpage.¹⁵

¹² https://cinea.ec.europa.eu/life/circular-economy-and-quality-life_el

¹³ https://cinea.ec.europa.eu/life/climate-change-mitigation-and-adaptation_el

¹⁴ https://cinea.ec.europa.eu/life/clean-energy-transition_el

¹⁵ https://cinea.ec.europa.eu/index_en

3.2.3 European Islands Facility – NESOI

Description/goal

The European Islands Facility – NESOI programme¹⁶ is funded by Horizon 2020 and targets a community of 2,400 inhabited islands of the EU. The programme objectives include funding 60 successful energy transition projects, significantly reducing CO₂ and greenhouse gas (GHG) emissions by 2023. It has a duration of 48 months, starting October 1, 2019, and concerns total investments over €100 million. NESOI offers specific support for the energy transition process, both at the European level and in the implementation of interventions on more than 60 islands of the EU.

The project aims to:

- Promote investments for the islands' energy transition
- Facilitate the decentralisation of energy systems
- Contribute to EU policies and the achievement of the 2030 targets

Expected results

- Investments of €100 million
- Primary energy savings of 440 GWh/year
- Avoidance of 160,000 ktCO₂ GHG/year

Beneficiaries

Islands of the EU, interconnected or non-interconnected.

The programme concerns projects of all kinds that contribute to the energy transition of the islands—projects of RES, energy efficiency (buildings, industry, public lighting, etc.), energy storage, smart grids, etc.

3.2.4 Clean energy for EU islands secretariat

The Secretariat of the EU for the Clean energy for EU islands programme has issued its first call for technical assistance. The technical support aims to provide tailored assistance to EU island operators regardless of the energy transition phase they are in.

The technical support could be related to the development of a strategic plan for the transition to clean energy to network integration studies, analysis of regulatory provisions, or support for finding funding for specific projects.

As a first step, interested parties may use a self-assessment tool (<https://www.euislands.eu/self-assessment-tool>) as a guide to the type of support required in their case. They will then need to complete a simple online form at <https://agatasmok.typeform.com/to/I7RdLIJ7>, which includes a description of the requested support service, the expected impact of the project, and the team responsible for implementation. All the details about

¹⁶ <https://www.nesoi.eu/>

the technical support and the application process are explained in the Guide for Applicants (<https://euislands.eu/.../2021-03/GuideForApplicants.pdf>).

Applications needed to be submitted online by May 4, 2021, 23:59 CET.

More information is available at <https://euislands.eu/node/892>.

3.2.5 European City Facility

Description/goal

The European City Facility (EUCF)¹⁷ is a European initiative, set up under Horizon 2020 for EU research and innovation, to support municipalities, local authorities, and European local public bodies in developing investment concepts to accelerate investments in sustainable energy. In form of a €60,000 grant, the EUCF finances services and activities to support the development of investment concepts such as feasibility studies; market analyses; stakeholder analyses; legal, economic, and financial analyses; risk analyses; and further supporting tasks. The grant is meant to enable access to services and the development of an investment concept, which might become a door-opener for many follow-up investments such as from ELENA (European Local Energy Assistance) and public-private partnerships (PPPs).

In particular, the initiative has the following aims:

- Provide technical and financial expertise, inspired by best-in-class European practice, to municipalities, local authorities, and local public entities to deliver credible investment projects, which should trigger public and private investment.
- Build the capacity of municipal staff to develop substantial project pipelines and provide them with tools, networking, and knowledge transfer opportunities that will facilitate and accelerate their implementation via innovative financing mechanisms.
- Facilitate access to private finance, EU funding streams, and similar facilities, such as the European Structural and Investment Funds, EU Project Development Assistance programmes and the European Investment Bank (EIB), and advisory services especially for small and medium-sized municipalities.
- Reach out to more than 10,000 local governments.

¹⁷ <https://www.eucityfacility.eu/home.html>

3.2.6 Interreg Europe

Interreg Europe¹⁸ is funded by the ERDF and helps regional and local authorities across Europe to develop and deliver better policies, to have opportunities for sharing solutions, and to ensure that investments lead to an integrated and sustainable impact for people and places. For the 2014-2020 period, the programmes concerned the following actions:

- Research and innovation
- Competitiveness of the media
- Low-carbon economy
- Resource and environment efficiency



Figure 5: Schedule to announce calls for proposals (Source: <https://www.interregeurope.eu/>)

¹⁸ <https://www.interregeurope.eu/>

For the 2021-2027 period, there is a commitment to continue supporting regional and local authorities throughout Europe. However, the content of the programmes and the thematic priorities for this period have not yet been announced.

Recently, the consultation process for the following Interreg transnational programmes was completed:¹⁹

- Programme 1: INTERREG VI CBC Greece-Cyprus 2021-2027
- Programme 2: INTERREG VI CBC Greece – Bulgaria 2021-2027
- Programme 3: INTERREG VI CBC Greece – Italy 2021-2027
- Programme 4: INTERREG VI IPA - CBC Greece – Albania 2021-2027
- Programme 5: INTERREG VI IPA - CBC Greece – Republic Of North Macedonia 2021-2027
- Programme 6: ADRION 2021-2027
- Programme 7: EURO MED
- Programme 8: NEXT MED
- Programme 9: BLACK SEA
- Programme 10: INTERREG EUROPE
- Programme 11: INTERACT
- Programme 12: ESPON2030
- Programme 13: URBACT IV

3.2.7 Urban Innovative Actions

Description/goal

Urban Innovative Actions (UIA)²⁰ was an EU initiative that provides urban areas throughout Europe with resources to test new and unproven solutions to address urban challenges. The initiative had a total ERDF budget of €372 million for 2014-2020.

The main objective of UIA was to provide urban areas throughout Europe with resources to test innovative solutions and see how these work in practice and respond to the complexity of real life.

Beneficiaries

The initiative was addressed to urban authorities (cities, town councils, etc.) of more than 50,000 inhabitants or groupings of urban authorities, with a total population of a least 50,000 inhabitants, located in one of the 27 EU member states.

3.2.8 The European Climate Initiative

The European Climate Initiative (EUKI)²¹ is a financing instrument by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), which funds climate protection projects

¹⁹ <https://interreg.gr/programming-period-2021-2027/>

²⁰ <https://uia-initiative.eu/en>

²¹ <https://www.euki.de/en/topics/>

throughout the EU. Its primary goals are the intensification of cross-border dialogue and the exchange of knowledge and experiences within the EU. The EUKI community of project partners and associates promotes the implementation of the Paris Agreement while helping to reduce GHG emissions.

Potential project applicants can apply for funding in a call for project ideas held once a year where innovative approaches to European climate protection are presented. In addition, the BMU regularly publishes plans that are of particular importance to the climate policy of the German government and its EU partners.

Most EUKI projects operate across borders at the national, regional, or local level. The geographical focus is primarily on collaborations with central, eastern, and southern European countries. The call for project ideas is open to partnerships of nongovernmental organisations, services, nonprofit enterprises, scientific and educational institutions, and local and regional authorities. The plans support the implementation and further development of national strategies and policies.

EUKI also promotes the development of networks, knowledge, and skills through the EUKI Academy. In online seminars or events, participants are trained in project management, public relations, etc. while an annual networking conference is held in Berlin.

EUKI finances climate action projects in eight core areas:

- Climate policy
- Energy
- Buildings and municipalities
- Mobility
- Agriculture, soils, and forestry
- Information and awareness
- Climate-aligned finance
- Sustainable economy

The following illustration shows the distribution of the 128 EUKI projects to date across the EUKI themes.

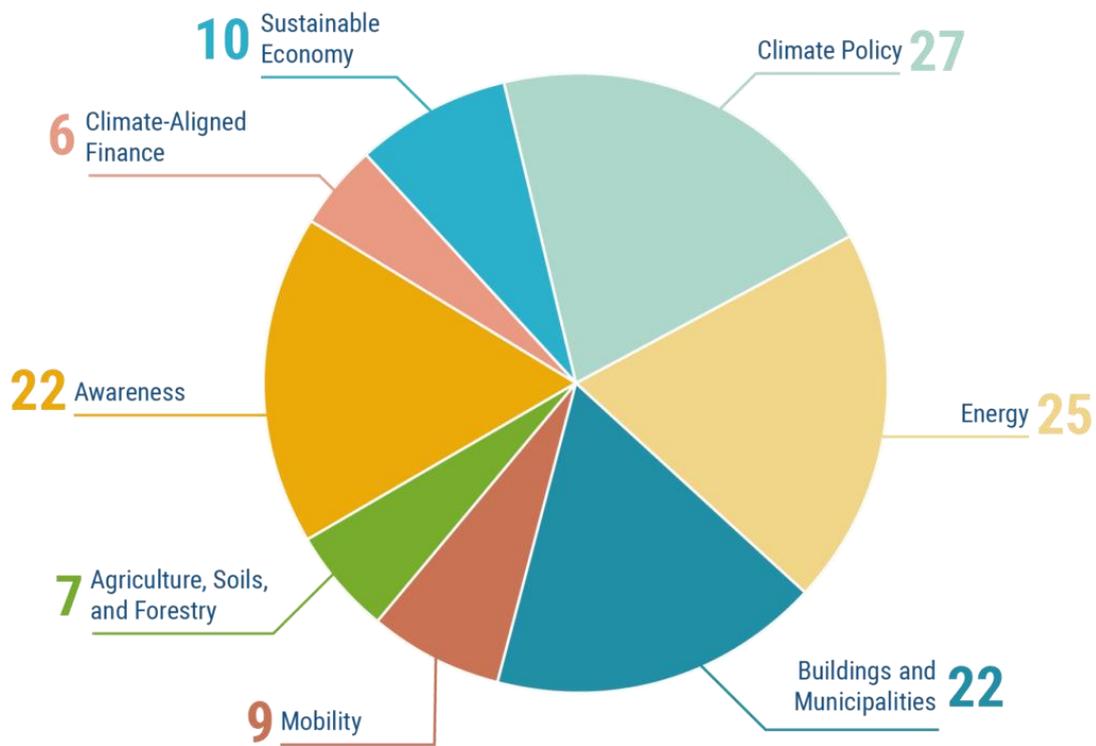


Figure 6: Distribution of 128 EUKI projects
Source: <https://www.euki.de/en//more-about-euki/#toggle-id-5>

3.3 Financial instruments of financial institutions

3.3.1 ELENA

Description

The ELENA²² programme is a European financial instrument aimed at providing technical assistance to accelerate investment programmes in the fields of energy efficiency, sustainable urban mobility and transport, and sustainable housing (see the following figure). It was established in 2009, and is managed by the EIB²³ on behalf of the European Commission.

Energy efficiency: ELENA supports the preparation of projects aimed at improving energy efficiency and the use of RES in the buildings sector.

Sustainable housing: Support of individuals and owners associations for the development and implementation of energy upgrade projects and integration of RES systems in residential buildings.

Urban transport and mobility: Support for innovative projects in the field of transport and mobility in urban environments to achieve energy savings and reduce GHG emissions.

Figure 7: ELENA funding priorities

Funding information:

- Minimum investment of €30 million.
- The grant covers up to 90% of the project development costs.
- The grant is provided on a first come, first served basis until the budget is used up; the budget is estimated at €30 million-€50 million per year.
- The implementation period of the project ranges between 3 and 4 years.
- Obligation to implement the project and comply with the leverage factor:
 - 20 for sustainable energy projects
 - 10 for housing and transport projects

²² <https://www.eib.org/en/products/advising/elena/index.htm>

²³ <https://www.eib.org>

3.4 Other funding sources

3.4.1 Consignment Deposits and Loans Fund

Description

The Consignment Deposits and Loans Fund (CDLF²⁴) was established by Law 1608/1919. Its lending operations were laid down in P.D 256/84. It is likely the main source of lending for municipalities; it grants loans to local authorities for various purposes with regard to their responsibilities against the main guarantee of the assignment of corresponding revenues. It also distributes state grants. CDLF also operates safe deposit boxes and monitors the repayment of mortgages.

Objectives

Among other things, the CDLF supports local and regional development by granting loans to municipalities and prefectures as well as their groupings, local government organisations, public law entities, and public bodies with the primary purpose of implementing infrastructure projects or projects of public interest serving the regional development of the country.

Additional objectives of the fund involve the facilitation of debt servicing and the achievement of indirect financial benefits for local government organisations and public law entities through the reduction of the billed energy that will result from estimated annual reductions of electricity consumption (installation of a solar plant that will operate with net metering or virtual net metering).

The CDLF also manages the new [Electra Programme for the Energy Upgrade of Public Buildings](#)²⁵. The aim of the programme is the energy upgrade of the building stock of the General Government. Interventions concern the building shell, various electromechanical installations, and interventions proven to contribute to the energy upgrade of buildings, including static reinforcement, where necessary. [1]

Detailed instructions on the beneficiaries, eligible projects, and participation requirements are available on the Hellenic Agency for Local Development and Local Government (E.E.T.A.A.) S.A. website.²⁶

²⁴ <https://www.tpd.gr/>

²⁵ https://ypen.gov.gr/wp-content/uploads/2020/12/KYA-YΠEN_Δ_-75516_436_31.07.2020-ΦΕΚ-B-3156.pdf

²⁶ https://www.eetaa.gr/fundings/index.php?tag=view_programmata_details&programma_id=61

3.4.2 Public-private partnerships

Description

Public-private partnerships (PPPs)²⁷ are part of the Ministry of Economy and Finance and operate under the Special Public Private Partnerships Secretariat to support the PPP Directorate and Public Bodies. The purposes of the Special PPP Secretariat include identifying projects or services that can be performed or provided through PPPs.

Objectives

- Improvement of the quality-price ratio of infrastructure in general by using the potential of private sector innovation, aiming to achieve better value for money.
- Uniform distribution of infrastructure financing costs throughout the life of the asset, with the aim of reducing the public budget and facilitating the completion of infrastructure projects and early repayment of capital costs by several years.
- Improvement of risk sharing between individuals and the public sector. If the allocation is correct, more rational risk management reduces the overall cost of projects. [6]

Leading Practice

A leading practice of a PPP project is the Design, Financing, Construction, Maintenance and Operation of the Integrated Waste Management System of the Western sector of Central Macedonia project.

Description of project: The waste treatment plant of the western sector of the Central Macedonia region has an annual capacity of approximately 300,000 tons and serves 10 municipalities that account for 64% of the generated mixed waste in the regional unit of Thessaloniki. The PPP will undertake the design, financing, construction, maintenance, and operation of the treatment facilities. The duration of the contract is 27 years: 3 years for construction and 24 for operation. The construction cost amounts to €118 million including value added tax (VAT).

Sector: Environment – Waste

Approval by PPP Directorate: 16.09.2019

Current status: Preparation of the first phase of the tender

Budget Project: €130,000,000

Contract term: 27 years

Project type: Availability payments

Type of tender procedure: Competitive dialogue

Duration of construction: 3 years

Duration of operation: 24 years

²⁷<http://www.sdit.mnec.gr/>

3.4.3 Crowd funding

Crowdfunding is a new form of alternative equity financing, which initially started operating outside the traditional financial system.

Crowdfunding is supported by private companies, which have designed easy-to-use online platforms, accessible to the public, where each project open to funding is presented. Modern local government can be open and participatory, supporting actions and ideas that originate from the citizens themselves to continuously improve services, local development, implementation of projects with social added value, and boost local entrepreneurship.

4 Funding challenges

The survey's results (see section 1.2) analysis and the secondary research identified two categories of challenges faced by the municipalities related to financing: difficulty in finding financial instruments and difficulty in utilizing them.

4.1 Difficulties in finding financial tools

Municipalities often lack information on funding options for climate action. This is an obstacle when it comes to identifying and selecting the best financial instruments to support relevant actions. In addition, municipalities often report the lack of possibilities to participate in the design of financial instruments, as well as the lack of communication with the various, responsible for the funding, European bodies.

4.2 Difficulties in using financial tools

4.2.1 Inadequate administrative capacity and technical expertise

A large percentage of Greek municipalities face problems regarding the competence of technical and scientific staff. The lack of qualified staff bears a high risk of substantial exclusion from financial instruments, as the development of competitive proposals requires mature studies that can be carried out either in-house by municipal officials or through external partnerships, which requires available financial resources. The maturation of studies, which is necessary for integration, requires specialised and appropriately trained staff. In the majority of cases related to local government, external associates are required (legislative framework for Public Procurement, Law 4412/2016), whereas the reduced revenues of municipalities do not allow for outsourcing.

The lack of qualified staff and specialised structures to manage projects related to energy and environmental protection in the areas examined in this study make it necessary to enhance the skills and knowledge of human resources involved through training programmes.

4.2.2 Budgetary and regulatory constraints

The economic crisis of the last decade in conjunction with over taxation, lack of liquidity, and cutdowns on General Government expenditure have significantly affected the operation of local government organisations throughout the country.

Preparing applications for the absorption of EU funds or other financial instruments requires hiring new qualified staff or outsourcing, which is a rather expensive option for municipalities. Moreover, obtaining co-financing from some European funds or creating new financial instruments requires resources from municipalities themselves. An additional obstacle is that many municipalities have difficulty in including new expenditures that have not been budgeted beforehand.

Finally, many municipalities report a mismatch of resource availability by geographical region and allocation of needs.

4.2.3 Bureaucracy and legal fragmentation

State interventions and multiple reforms in the country's social and economic spaces as well as legal fragmentation are causing regulatory underperformance and a swelling bureaucracy in Greece. Delays in the submission process, in receiving official approval of studies, and licensing procedure, often caused by the aspects previously mentioned result in slowdowns in energy and climate projects implementation.

4.3 The role of municipalities in the design of financial programmes and tools

Municipal authorities are often called upon to plan and implement actions related to energy and climate while seeking the appropriate funding mechanisms that they can utilize. Regarding the national financial instruments, it seems that there is a relative involvement of municipalities in the planning stage through their collective body, the Central Union of Greek Municipalities (KEDE). Their representation by KEDE concerns the participation in the public consultation on the plans of the NSRF (Partnership Agreement for the Development Framework) at the beginning of each programming period but also during the specialization of the Sectoral Operational Programs. Greater participation of the Municipalities is presented mainly during the design of the Regional Operational Programs where there is close cooperation with the respective Regional Authority but also during the stage of their public consultation. Regarding the planning of financial programs at European level, the municipalities have direct access only through their representation by KEDE to the national delegations in European organizations such as the European Committee of the Regions, Congress of Local and Regional Authorities of the Council of Europe and CEMR Policy Committee.

5 Conclusions

The role of the Municipal Authorities is emerging as extremely important in terms of the implementation of national energy and climate policy. However, the Municipalities do not seem to have the sufficient and necessary resources to meet the requirements of this role. The main factors leading to this conclusion come from both the views of the same staff working in local authorities and the performance of Municipalities in attracting and utilizing the various financial resources available at national and European level for energy and climate actions.

Cultivating a spirit of cooperation between large and small municipalities at all stages of the planning, financing and implementation of such actions can be beneficial for all parties involved. Larger municipalities can act locally as transmitters of knowledge and experience in order to multiply the benefits in the joint effort to tackle climate change and energy transition to a cleaner energy system.

Empowering municipalities with specialized and experienced personnel in matters of energy and climate and the modernization of their organizational structures emerges as the most important priority for the acceleration of the energy transition at local level.

The continuous training of municipal officials and staff in the available financial tools and how they can be used for the implementation of local energy and climate action plans is a necessary condition for municipalities to meet the growing demands arising from their role in mitigating climate change.

Finally, the utilization of local capacities in the field of energy and climate, through the cooperation of local authorities, universities, chambers and citizens' groups is essential in order to collectively participate in the planning and implementation of various actions, thus adding value at local level, strengthening the exemplary role of the public sector and increasing social acceptance of flagship projects in their area.

Annex 1

The following is a detailed table of financial instruments from national sources for first tier local government organisations included in the scope of the study. The table includes information on open calls for proposal during the study elaboration period.

Codification of thematic area	Codification of funded activities	Funding programme	Title of action	Funding body	Geographic area	Category of beneficiaries	Call bu (€)	Start of proposal period	Project completion by
c	12	OP Transport Infrastructure, Environment and Sustainable Development	Completion of urban wastewater collection and treatment infrastructure in the remaining settlements of Priority A and B	Ministry of Development and Investment - NSRF 2014-2020	Region of Attica	Municipalities of Rafina - Pikermi, Spata - Artemida, Marathon, Markopoulo Mesogaia, Kropia		15/10/2015	31/12/2023
b-c	7-8-9	Region of Eastern Macedonia-Thrace	INTERVENTIONS FOR SOIL CORROSION PROTECTION - ACTION 5b.9.3, Region of Eastern Macedonia-Thrace	Region of Eastern Macedonia-Thrace	Region of Eastern Macedonia-Thrace	Municipalities of the Region of Eastern Macedonia and Thrace	5,000,000	4/12/2015	31/12/2023
a-c	1-4-11	Regional Operational Programme (ROP) ATTICA	Energy Upgrading of Municipal Buildings and School Building Complexes in the Intervention Area	Region of Attica	Region of Attica	Municipality of Moschato - Tavros	8,979,448	20/7/2020	31/12/2023
c	12	Ministry of Development and Investment - NSRF 2014-2020	Implementation of mature projects for the recovery and/or disposal of municipal waste	Greek territory	Greek territory	Local authorities	20,000,000	16/11/2018	31/12/2021

Codification of thematic area	Codification of funded activities	Funding programme	Title of action	Funding body	Geographic area	Category of beneficiaries	Call bu (€)	Start of proposal period	Project completion by
b	11	Regional Operational Programme (ROP) Central Greece	Flood protection projects in urban and suburban areas of the Sustainable Urban Development Strategies	Region of Central Greece	Region of Central Greece	Municipality of Lamia - Municipality of Levadia, Thiva and Aliartos-Thespies - Utilities and other municipal bodies of the respective competent Municipalities of the Association of Municipalities of Northern & Eastern Athens	1,800,000	24/2/2020	31/12/2021
a-c	1-4	Regional Operational Programme (ROP) Central Greece	Projects for energy efficiency and saving in public buildings in the areas of intervention of the Sustainable Urban Development Strategies	Region of Central Greece	Region of Central Greece	Municipality of Lamia - Municipality of Levadia, Thiva and Aliartos-Thespies - Utilities and other municipal bodies of the respective competent Municipalities of the Association of Municipalities of Northern & Eastern Athens	1,000,000	24/2/2020	31/12/2021

Codification of thematic area	Codification of funded activities	Funding programme	Title of action	Funding body	Geographic area	Category of beneficiaries	Call bu (€)	Start of proposal period	Project completion by
a-c	2-4-13	European Regional Development Fund (ERDF)	<p>Installation of internal thermal insulation system. •</p> <p>Replacement of damaged luminaires with new ones and LED energy saving lamps. •</p> <p>Replacement of oil burners with gas burners of modern technology and high efficiency. •</p> <p>Replacement of suspended ceilings with fully insulated plasterboard. •</p> <p>Installation of an autoproducing solar system for zero electricity consumption at the KGBA. •</p> <p>Ex-post Energy Efficiency Certificate.</p>	Region of Central Greece	Region of Central Greece	Municipality of Farsala	340,025	1/9/2018	31/12/2023
a-c	2-4-13	European Regional Development Fund (ERDF)	<p>Installation of internal thermal insulation system. •</p> <p>Replacement of damaged luminaires with new ones and LED energy saving lamps. •</p> <p>Replacement of oil burners with gas burners of modern technology and high efficiency. •</p> <p>Replacement of suspended ceilings with fully insulated plasterboard. •</p> <p>Installation of an autoproducing solar system for zero electricity consumption at the KGBA. •</p> <p>Ex-post Energy Efficiency Certificate.</p>	Region of Central Greece	Region of Central Greece	Municipality of Farsala	547,556	22/4/2020	21/10/2022

Codification of thematic area	Codification of funded activities	Funding programme	Title of action	Funding body	Geographic area	Category of beneficiaries	Call bu (€)	Start of proposal period	Project completion by
a-c	2-4-13	European Regional Development Fund (ERDF)	Building upgrade of the first Highschool of Farsala. This is an existing school building of the Energy Category G, which is expected to be upgraded to Category B by improving its energy performance. The energy upgrade of a building includes the following interventions: Shell thermal insulation, replacement of frames, optimisation of the heating system, installation of LED luminaires. The operation is expected to have a reduced energy consumption of the building and reduced CO ₂ emissions through the upgrade of the building's Energy Efficiency Category. This in turn will upgrade thermal comfort conditions and, consequently, improve the quality of the school's operating conditions and the well-being of students and teaching staff.	Region of Central Greece	Region of Central Greece	Municipality of Farsala	759,500	1/2/2021	30/09/2023

a-c	2-4-13	European Regional Development Fund (ERDF)	<p>Buildings of the vocational high school of Farsala. The buildings are existing Energy Class G and E vocational school buildings, which are expected to be upgraded to Category B by improving their energy performance. The energy upgrade includes the following interventions: Thermal insulation system of building shells, thermal insulation system of the roofs of the buildings, replacement of frames and glazing with new thermal insulation materials, replacement of old luminaires with modern LED technology luminaires, upgrade of the heating system with replacement of the existing heating system. The operation is expected to have a reduced energy consumption of the building and reduced CO₂ emissions through the upgrade of the building's Energy Efficiency Category. This in turn will upgrade thermal comfort conditions and, consequently, improve the quality of the school's operating conditions and the well-being of students and teaching staff.</p>	Region of Central Greece	Region of Central Greece	Municipality of Farsala	809,100	1/2/2021	30/09/2023
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Codification of thematic area	Codification of funded activities	Funding programme	Title of action	Funding body	Geographic area	Category of beneficiaries	Call bu (€)	Start of proposal period	Project completion by
c	8	European Regional Development Fund (ERDF)	The sidewalks will be redone with cold ground cover materials, trees will be placed to provide proper shading depending on the season, there will be provision for garbage cans and lighting fixtures will be installed. The sidewalks will be reconstructed to ensure the smooth movement of citizens and the northwestern part of the city will be safely connected to the centre.	Region of Central Greece	Region of Central Greece	Municipality of Farsala	1,200,000	10/12/2018	10/06/2021
a-b-c	3	Horizon 2020	C-Track 50 aims to mobilise and guide public authorities at the local government level, with the aim of achieving resilience to climate change as well as carbon neutrality by 2050.	Region of Central Greece	Region of Central Greece	Municipality of Farsala			
a-c	2-4-12-13	Contractor Funds (PPPs)	Extension-Maintenance of LED street lighting	Region of Central Greece	Region of Central Greece	Municipality of Dorida	470,000		
b	3	Horizon 2020	Digital Europe Programme EU	Region of Central Greece	Region of Central Greece	Municipality of Dorida			
a	1-4	Horizon 2020	Horizon 2020	Region of Central Greece	Region of Central Greece	Municipality of Dorida			
b	12	Regional Operational Programme (ROP) ATTICA	Development of smart city applications in the Municipality of Mandra Eidyllia	Region of Attica	Region of Attica	Municipality of Mandra Eidyllia	650,000	21/1/2021	21/6/2021

Codification of thematic area	Codification of funded activities	Funding programme	Title of action	Funding body	Geographic area	Category of beneficiaries	Call bu (€)	Start of proposal period	Project completion by
c	8	Regional Operational Programme (ROP) ATTICA	Green cultural trails	Region of Attica	Region of Attica	Municipality of Paleo Faliro, Municipality of Alimos,	3,500,000	07/12/202	31/12/2021
c	8	Regional Operational Programme (ROP) ATTICA	Paths and configurations along streams	Region of Attica	Region of Attica	Municipality of Paleo Faliro, Municipality of Alimos,	700,000	7/12/2021	31/12/2021
c	8	Regional Operational Programme (ROP) ATTICA	Improvement and upgrading of social infrastructure that will contribute to the local development of the intervention area	Region of Attica	Region of Attica	Municipality of Moschato-Tavros, Municipality of Nea Smyrni	6,700,000	5/11/2018	31/12/2021
a	1-4	Regional Operational Programme (ROP) ATTICA	Bioclimatic upgrading of selected municipal buildings	Region of Attica	Region of Attica	Municipality of Alimos, Municipality of Paleo Faliro	5,900,000	10/2/2020	31/12/2021
b	3	Regional Operational Programme (ROP) CRETE	Call for Integrated Spatial Investment UNESCO_1 areas	Region of Crete	Region of Crete	Municipalities	8,200,000	27/3/2019	16/4/2021
b	3	Regional Operational Programme (ROP) CRETE	Call for Integrated Spatial Investment RETHYMNO_1	Region of Crete	Regio of Crete	Municipality of Rethymno - Municipality of Agios Vassilios	9,750,000	27/3/2019	16/4/2021
b	3	Regional Operational Programme (ROP) CRETE	Call for Integrated Spatial Investment LASITHI_1	Region of Crete	Region of Crete	Municipalities of Agios Nikolaos- Ierapetra- Lassithi	10,250,000	27/3/2019	16/4/2021

Codification of thematic area	Codification of funded activities	Funding programme	Title of action	Funding body	Geographic area	Category of beneficiaries	Call bu (€)	Start of proposal period	Project completion by
c	8-13	Regional Operational Programme (ROP) Central Greece	Upgrading of the local road network in the intervention areas of the Sustainable Urban Development Strategies	Region of Central Greece	Region of Central Greece	Municipalities of Aliartos - Thespies, - Thiva-Lamia	2,400,000	04/05/2020	31/12/2021
c	4-13	Regional Operational Programme (ROP) Central Greece	Application of energy saving systems and technologies in the intervention areas of the Sustainable Urban Development Strategies	Region of Central Greece	Region of Central Greece	Municipalities of Thiva- - Livadia	800,000	30/4/2020	31/12/2021
c	8	Regional Operational Programme (ROP) Central Greece	Upgrading of the urban environment in the intervention areas of the Sustainable Urban Development Strategies	Region of Central Greece	Region of Central Greece	Municipalities of Aliartos - Thespies, - Lamia-- Livadia- Thiva	4,000,000	27/4/2020	31/12/2021
c	6-8-10-13	Regional Operational Programme (ROP) Central Greece	Improvement of urban mobility in the areas of intervention of the Sustainable Urban Development Strategies	Region of Central Greece	Region of Central Greece	Municipalities of Thiva-Livadia-Aliartos-- Thespies-Lamia	5,600,000	18/5/2020	31/12/2021
c	8	Regional Operational Programme (ROP) Central Greece	Interventions for the development of points of interest along the "Cultural, Environmental, Tourist Route of the Region of Central Greece"	Region of Central Greece	Region of Central Greece	Municipality of Karpenissi	1,040,000	8/3/2021	30/9/2021

Codification of thematic area	Codification of funded activities	Funding programme	Title of action	Funding body	Geographic area	Category of beneficiaries	Call bu (€)	Start of proposal period	Project completion by
c	7-10	Regional Operational Programme (ROP) Central Greece	Upgrading of the local road network in the intervention areas of the Strategic Operational Plan (Action Plan) for the Urban, Social, Environmental and Business Revitalisation and Consolidation of the wider area of the Asopos river catchment basin	Region of Central Greece	Region of Central Greece	Municipality of Tanagra	4,500,000	21/6/2020	30/9/2021
a-c	1-5-8-10-11	Regional Operational Programme (ROP) Western Greece	Actions for the Implementation of Strategic Integrated Spatial Investments in Katakolo - Ancient Olympia and Mesologgi - Aetoliko	Region of Western Greece	Region of Western Greece	Municipalities of Ancient Olympia- Messologi- Pyrgos	18,300,000	18/5/2020	31/12/2021
a	4	Regional Operational Programme (ROP) Western Macedonia	Actions to improve the energy efficiency of public buildings /Integrated Spatial Investment	Region of Western Macedonia	Region of Western Macedonia	Municipalities of Amyntaio- Velvento- Deskati- Kastoria- Kozani	5,000,000	30/12/2020	29/4/2021
b	8-10	Region of Eastern Macedonia-Thrace	Protection and Development of Regional Ecosystems	Region of Eastern Macedonia-Thrace	Region of Eastern Macedonia-Thrace	Municipalities of the Region of Eastern Macedonia and Thrace	4,000,000	10/5/2016	31/12/2023
b	8-10	Region of Eastern Macedonia-Thrace	Interventions for Soil Corrosion Protection - Action	Region of Eastern Macedonia-Thrace	Region of Eastern Macedonia-Thrace	Municipalities of the Region of Eastern Macedonia and Thrace	5,000,000	4/12/2015	31/12/2023

Codification of thematic area	Codification of funded activities	Funding programme	Title of action	Funding body	Geographic area	Category of beneficiaries	Call bu (€)	Start of proposal period	Project completion by
c	12	Ministry of Development and Investment - NSRF 2014-2020	Bio-waste management actions, 14.Gi.26.2-4.1 (Attica Region and Peloponnese Region)	Region of Attica, Region of the Peloponnese	Region of Attica, Region of the Peloponnese	Municipalities of Attica, Peloponnese Region	10,000,000	2/9/2019	10/7/2021
c	12	Ministry of Development and Investment - NSRF 2014-2020	Integrated municipal solid waste management actions on islands and small remote settlements in Regions in Transition (Ionian Islands and North Aegean Regions)	North Aegean Region, Ionian Islands Region	North Aegean Region, Ionian Islands Region	Municipalities of the Ionian Islands and North Aegean Regions	32,619,029	21/12/2018	2/7/2021
c	12	Ministry of Development and Investment - NSRF 2014-2020	Creation of Green Points in the South Aegean Region	South Aegean Region	South Aegean Region	Municipalities of the South Aegean Region	2,000,000	30/3/2020	2/7/2021
c	12	Ministry of Development and Investment - NSRF 2014-2020	Integrated bio-waste and municipal solid waste management actions in the South Aegean Region	South Aegean Region	South Aegean Region	Municipalities of the South Aegean Region	10,380,972	30/3/2020	2/7/2021
c	12	Ministry of Development and Investment - NSRF 2014-2020	Maturity of Urban Waste Management Projects	Greek territory	Greek territory	Municipalities in the Greek territory	4,000,000	1/6/2020	2/7/2021
c	12	Ministry of Development and Investment - NSRF 2014-2020	Municipalities throughout the country excl. South Aegean Region	Greek territory	Greek territory	Municipalities throughout the country excl. South Aegean Region	6,800,000	30/6/2020	2/7/2021

Codification of thematic area	Codification of funded activities	Funding programme	Title of action	Funding body	Geographic area	Category of beneficiaries	Call bu (€)	Start of proposal period	Project completion by
a-c	1-2-4-8-10	Ministry of Development and Investment - NSRF 2014-2020	Interventions for upgrading and modernising the building stock of architectural value and cultural interest, at important locations in relation to the network of historical, environmental or cultural routes	Greek territory	Greek territory	Local government bodies throughout the country	15,000,000	1/7/2020	2/7/2021
c	12	Ministry of Development and Investment - NSRF 2014-2020	Completion of urban wastewater collection and treatment infrastructure in C' priority settlements (population 2.000-15.000)	Greek territory	Greek territory	First tier local authorities throughout the country	97,499,505	6/12/2018	30/6/2021
c	12	Ministry of Development and Investment - NSRF 2014-2020	Implementation of mature municipal waste management projects on islands, excluding South Aegean and Crete	Region of Eastern Macedonia and Thrace, Attica, North Aegean, Western Greece, Western Macedonia, Epirus, Thessaly, Ionian Islands, Central Macedonia, Peloponnese, Central Greece	Region of Eastern Macedonia and Thrace, Attica, North Aegean, Western Greece, Western Macedonia, Epirus, Thessaly, Ionian Islands, Central Macedonia, Peloponnese, Central Greece	Municipalities of islands in all regions, excluding the South Aegean and the Crete Region	7,400,000	30/4/2020	30/6/2021

Codification of thematic area	Codification of funded activities	Funding programme	Title of action	Funding body	Geographic area	Category of beneficiaries	Call bu (€)	Start of proposal period	Project completion by
c	12	Ministry of Development and Investment - NSRF 2014-2020	Bio-waste Management - Attica Region	Region of Attica	Region of Attica	Municipalities - First Tier Local Authorities of the Attica Region	20,000,000	15/1/2021	30/6/2021
c	12	Ministry of Development and Investment - NSRF 2014-2020	Establishment of Green Points in the Region of Western Greece and interconnection	Region of Western Greece	Region of Western Greece	Municipalities in the Region of Western Greece	3,500,000	23/11/2020	30/6/2021
c	12	Ministry of Development and Investment - NSRF 2014-2020	Completion and expansion of integrated waste management infrastructure in the Region of Western Greece	Region of Western Greece	Region of Western Greece	Local Government bodies of Western Greece	10,900,000	9/11/2020	30/6/2021
c	12	Ministry of Development and Investment - NSRF 2014-2020	Improvement and regeneration of the urban environment through pilot and other environmental projects that contribute to the Integrated Strategic Intervention Plan of the Asopos Water basin	Region of Western Greece	Region of Western Greece	Municipality of Tanagra	3,000,000	22/6/2020	22/6/2021
a	1-2-4	Antonis Tritsis programme for local administration actions to promote development and solidarity	Interventions and actions to improve energy management and utilisation of Renewable Energy Sources in water and wastewater management infrastructure	Greek territory	Greek territory	Municipalities in the Greek territory	150,000,000	24/7/2020	31/5/2021

Codification of thematic area	Codification of funded activities	Funding programme	Title of action	Funding body	Geographic area	Category of beneficiaries	Call bu (€)	Start of proposal period	Project completion by
b	3-9-10-11	Antonis Tritsis programme for local administration actions to promote development and solidarity	Urban regeneration	Greek territory	Greek territory	Municipalities in the Greek territory	400,000,000	24/7/2020	31/5/2021
c	12	Antonis Tritsis programme for local administration actions to promote development and solidarity	Integrated urban wastewater management	Greek territory	Greek territory	Municipalities in the Greek territory	200,000,000	28/8/2020	31/5/2021
c	12	Antonis Tritsis programme for local administration actions to promote development and solidarity	Separate Bio-Waste Collection, Recycling Corners and Waste Transfer Plants	Greek territory	Greek territory	Municipalities in the Greek territory	220,000,000	29/9/2020	31/5/2021
c	6-7-8-9	Antonis Tritsis programme for local administration actions to promote development and solidarity	E-mobility actions in municipalities	Greek territory	Greek territory	Municipalities in the Greek territory	120,000,000	29/9/2020	31/5/2021

Codification of thematic area	Codification of funded activities	Funding programme	Title of action	Funding body	Geographic area	Category of beneficiaries	Call bu (€)	Start of proposal period	Project completion by
c	4-11	Antonis Tritsis programme for local administration actions to promote development and solidarity	Smart cities, intelligent applications, systems and platforms for safety, health - welfare, e-government, education - culture - tourism and environment, civil protection actions and measures	Greek territory	Greek territory	Municipalities in the Greek territory	130,000,000	19/10/2020	31/5/2021
b	3	Regional Operational Programme (ROP) Ionian Islands	Risk assessment and risk prevention actions from natural and man-made disasters in the maritime area of the Ionian Islands Region	Ionian Islands Region	Ionian Islands Region	Local government bodies (region and municipalities of Ionian Islands)	4,000,000	7/12/2020	31/5/2021
c	13	Consignments Deposits and Loans Fund (CDLF)	IMPROVEMENT OF ENERGY EFFICIENCY OF THE MUNICIPAL LIGHTING NETWORK	Greek territory	Greek territory	Municipalities in the Greek territory	To be determined by local government bodies		31/12/2023
c	3-5-8-10-11	Green Fund	Natural environment and innovative actions 2020 in the priority axes 1,2,4	Greek territory	Greek territory	Municipalities in the Greek territory	5,000,000		31/12/2023
a-c	1-2-4-5-8	Infrastructure Fund of Funds (InfraFoF) / European Investment Bank (EIB)	Call for proposals for financing energy efficiency, renewable energy, environmental protection and urban development projects	Greek territory	Greek territory	Municipalities in the Greek territory	15,000,000		31/12/2023
a-c	4-8-11	Green Fund	ENVIRONMENTAL IMPACT ACTIONS for the year 2021	Greek territory	Greek territory	Municipalities in the Greek territory	23,160,274	9/2/2021	31/12/2021
c	12	Ministry of Interior FILODIMOS I	Restoration of Uncontrolled Waste Disposal Sites	Greek territory	Greek territory	Municipalities in the Greek territory	2,300,000	12/31/2022.	31/12/2022

Codification of thematic area	Codification of funded activities	Funding programme	Title of action	Funding body	Geographic area	Category of beneficiaries	Call bu (€)	Start of proposal period	Project completion by
c	12	Ministry of Interior FILODIMOS II	Procurement of waste collection and other vehicles for the collection and transport of waste and recyclable materials	Greek territory	Greek territory	Municipalities in the Greek territory	54,450,000	6/8/2020	31/12/2022
b-c	3	Green Fund	Ongoing Programme 2021 "Financing of projects and actions for the development of sustainable economic activities with low-carbon and environmental footprint in the Regional Units of Kozani, Florina and in the Municipality of Megalopoli, Regional Unit of Arcadia"	Region of Western Macedonia, Region of Peloponnese	Region of Western Macedonia, Region of Peloponnese	Municipalities of Kozani-Florina- Megalopoli	31,391,473		
a	2	Consignments Deposits and Loans Fund (CDLF)	Implementation of interventions for electricity generation with net metering in municipal, regional and public infrastructures	Greek territory	Greek territory	Municipalities in the Greek territory			31/12/2023
c	3-4	Private funds	Energy Performance Contracts	Greek territory	Greek territory	Municipalities in the Greek territory			
a-c	1-2-6	Private funds	Energy Communities	Greek territory	Greek territory	Municipalities in the Greek territory			
a-c	1-2-12	Private funds	Concession Agreements	Greek territory	Greek territory	Municipalities in the Greek territory			
a-c	1-2-5-7-10	ELENA programme	ELENA Programme	Greek territory	Greek territory	Municipalities in the Greek territory			

