





Action plan for fostering energy efficiency in public buildings



REGIONAL ACTION PLAN for the ZLÍN REGION, CZECH REPUBLIC September 2021







Index

0	Intro	oduction2					
1	Part	I – Background4					
	1.1	General information	4				
	1.2	Policy context	4				
	1.3	Main findings from the Regional diagnosis	7				
2	Part	II – Methodology 11					
	2.1	Interregional approach and conclusions	11				
	2.2	Regional approach. Stakeholders	14				
	2.3	Process of regional strategic thinking	17				
	2.4	List of relevant objectives and possible solutions	23				
3	Part	III – Actions24					
	3.1	Action 1: Promoting of new projects supporting the energy efficiency in public buildings	25				
	3.2	Actions summary	31				
4	Part	IV – Regional Action Plan Endorsements					







o Introduction

The elaboration of the action plan for the Zlín Region was based on a participatory approach with the involvement of representatives of the Zlín Region, towns and municipalities of the Zlín Region and other local and regional important and relevant stakeholders. The key stakeholders at the national level were, for example, members of the OP Environment Monitoring Committee from the National Network of Local Action Groups or from the State Environmental Fund administering OP Environment. All stakeholders are directly or indirectly involved in building renovation and energy-efficient building activities, the creation and renovation of district heating and other urban renewal actions in the regions. The COVID-19 crisis, which affected a greater part of the project realisation, also brought further challenges, and showed that the need to find new solutions to our needs is becoming increasingly important.

The core of this document is structured into three parts. After this introductory part, **Part I - Background** focuses on the political context and dynamics of development in promoting energy efficiency in public buildings at the national and regional levels. The presentation of such a development takes place in three lines:

- 1) general information about the background of the project,
- 2) strategic national policy instrument addressed in the LC DISTRICTS project OP Environment 2021–2027 and the link of the action plan to RIS₃,
- 3) the main findings of regional diagnostics, including relevant data, programs and initiatives that support the low-carbon transition, and the main conclusions.

Part II - Methodology presents the following procedures in four sections:

- 1) an interregional approach and conclusions explaining the results achieved by the interregional and international experience-sharing process,
- 2) the regional approach, which is characterized by the regional actors involved, a description of how to work with them and the main conclusions.
- 3) the process of regional strategic thinking, including the matrix of the process of strategic thinking, meetings of stakeholders within this process and the conclusions reached
- 4) a list of the main needs obtained from regional diagnostics and their possible solutions

Finally, **Part III - Actions** provides details of specific actions that have been proposed to influence the policy instrument of the OP Environment 2021-2027.

The aim of the Interreg Europe program and our LC DISTRICTS project is to implement a regional action plan with the aim of improving the national strategic instrument - the Operational Program Environment. The specific area on which the project focuses and for which it aims to optimize the use of public funds is listed in the OPE 2014–2020 program under priority 5.1 - Decrease the energy demand of public buildings and increase the use of renewable energy sources. The aim of the measure is buildings with a high potential for cost-effective solutions.

High investment costs are the main obstacle to the implementation of cost-saving measures and the installation of alternative energy sources for heating and hot water in buildings owned by municipalities and regions. The potential lies in heat sources and final consumption, where most buildings have not yet been







insulated and no further cost-saving measures are being implemented. The proposed measures will also help reduce energy dependence. the owners of public buildings are the main target group.

The main reasons for improvement are the following:

- promoting the efficient and sustainable use of energy resources in the transition to a low-carbon economy,
- reduction of final energy consumption in public buildings,
- contributing to the achievement of the EU 2030 targets, ie reducing greenhouse gas emissions by 40% and increasing the share of energy savings and renewables to 27%,
- increase in the number of approved projects

In the context of international cooperation within the project, the partner regions set the goals defined in the following graphic:

What we are aiming to achieve in each region

Småland and the islands Sweden passed legislation to attain 100% renewable electricity production along with net zero greenhouse gas emissions targets by 2040 and 2045, respectively. Although great attempts have been made to improve energy efficiency and reduce the utilization of nonrenewable energy resources in the building sector, existence of a number of barriers hinders the transition to a low-carbon society. Several research activities are carried out to overcome barriers stakeholders face when constructing new buildings or renovating the existing ones.

Navarre

More than 60% of the housing stock in Navarra was built in the past under previous and lax building requirements in terms of energy efficiency. Improving the regional policy and developing an integrated assessment methodology. Navarra is looking for **fostering public and private owned dwellings' refurbishment** in order to achieve environmental friendly cities and **enhance a welfare society eradicating energy poverty and improving citizens' health**.

Zlín Region

In the Czech Republic, both partners are working to improve policy on national level. They decided to focus on public buildings because many of them are not energy efficient in the country. The main goal is to improve **investment and non-investment support for owners** to facilitate the energy transition, thus achieving **energy savings and improving the indoor environment for building users**.

North-West Croatia

There is a significant amount of work to be done in Croatia in energy efficiency in buildings and district heating sectors. North-West Croatia Regional Energy Agency focuses on **improving the main policy documents with respect to financing of measures.** The main aim is to foster the energy transition in both sectors to **extract synergies and to give recommendations** for the new operational programme in the next programming period 2021-2027.

Marche Region

Marche Region manages energy regional planning and financial instruments directly, in particular approves the financing calls, defines the evaluation and priority criteria of the projects, defines the indicators for monitoring the impact of the implemented actions. Marche Region aims at improving its policies, supporting the transformation towards low carbon city districts promoting energy efficiency, smart energy management and the use of renewable energy in public infrastructure, buildings in the housing sector, also creating a new sustainable urban planning that combines energy efficiency with seismic retrofitting in the area affected by 2016 earthquakes.

Pic. 1 – Involvement of LC DISTRICTS partners regions

This document focuses on the presentation of a regional action plan, which was developed for the Zlín Region in the Czech Republic with the aim of influencing the policy instrument of the OPE 2021–2027. The action plan was prepared by the Energy Agency of the Zlín Region with the support of the University Center for Energy Efficient Buildings of the Czech Technical University in Prague.







1 Part I – Background

1.1 General information

Project Name	Towards low carbon city districts through the improvement of regional policies			
Project Acronym	LCDISTRICTS			
Partner organisation(s) concerned	Energy Acency of the Zlín Region University centre for energy effcient buildings CTU in Prague			
Country	Czech Republic			
NUTS2 region	CZ 07 – Central Moravia			
Contact person	Tomáš Perutka			
Email address	tomas.perutka@eazk.cz			
Phone Number	+420603883777			

1.2 Policy context

1.2.1 Policy instrument

The Action Plan aims to impact:

- ✓ Investment for Growth and Jobs programme
- European Territorial Cooperation programme
- Other regional development policy instrument

Name of the policy instrument(s) addressed::

Operational programme Environment 2021 - 2027

Within the framework of the EU cohesion policy, projects from various operational programs covering a wide range of regional development needs are supported in the Zlín Region. The political instrument addressed in the LC DISTRICTS regional action plan is the OPE 2021–2027. The program has a financial envelope of around \notin 2.4 billion (\notin 2.0 billion from the Cohesion Fund and \notin 0.4 billion from the ERDF).







As regards the improvements envisaged for OPE measures 2021-2027, which are addressed by this regional action plan, these measures focus in particular on increasing the funding opportunities available to support energy efficiency in public buildings, improving the efficiency of processes and procedures for managing the operational program, assessment and monitoring the impact of environmentally friendly renovations and helping to achieve the targets set in the program for indicators such as energy savings in buildings and the reduction of greenhouse gas emissions.

National authorities are responsible for implementation and monitoring, but energy end-users are required to take energy efficiency measures. Regional and local authorities thus play an important role in supporting the transition to low-carbon areas; they own and maintain a large number of public buildings, define the sustainable development of their areas, and are considered role models for others.

A total of 6 calls were opened for the specific objective of the OPE 5.1 in the period 2014–2020. The results from the first 3 years were not very optimistic; interest was low, and many projects were not submitted / approved. In April 2017, changes were made to simplify the conditions for increasing the number of projects and releasing additional money from the allocation. The changes have led to a significant improvement in the results of the calls; however, the fulfilment of both national (energy savings in PJ) and program (decrease in final energy consumption of public buildings) indicators still did not fully meet expectations.

As the instrument OPE 2014–2020 becomes irrelevant for the purposes of the LC DISTRICTS project in 2021, the Regional action plan for the Zlín Region will focus on its successor, which is OPE 2021–2027. The original Measure 5.1 in the OPE 2014-2020 – "Reduce the energy demand of public buildings and increase the use of renewable energy sources", on which the LC DISTRICT project focuses, is now represented in the OPE 2021–2027 in specific objectives 1.1 – "Support for energy efficiency measures" and 1.2 – "Promotion of energy from renewable sources".

The program is planned for the European programming period 2021-2027. Eligibility of expenditure ends in 2029, when the program will finally be closed. The program applies to all NUTS2 regions in the Czech Republic and concerns the European Regional Development Fund and the Cohesion Fund. The document is still in the concept phase - negotiations are underway with the European Commission and other partners. Therefore, the wording of the document may still change over time.

Specific objective 1.1 Support for energy efficiency measures

Under the specific objective, activities related to reducing the energy demand of public buildings and public infrastructure will be supported. These are mainly:

- reducing the energy demand of public buildings and public infrastructure,
- reduction of energy demand of technological energy consumption systems,
- construction of new public buildings that will meet the parameters for passive or energy positive buildings.

As part of the goal of implementing complex projects, measures monitoring the following features will be supported as accompanying activities:

- improving the quality of the indoor environment of buildings,
- increasing the adaptability of buildings / infrastructure to climate change.







The expected contribution of these activities to the specific objective is to reduce the energy intensity of public buildings / infrastructure and thus to reduce final energy consumption. Another expected contribution is the construction of new positive or passive buildings, which will serve, among other things, as examples of good practice for further construction in the public and private sectors.

At the same time, these activities contribute to reducing greenhouse gas emissions and adapting to climate change. Public entities are the main target group.

Specific objective 1.2 Promotion of energy from renewable sources

Under the specific objective, activities related to increasing the use of renewable energy sources will be supported. These are mainly:

- construction and reconstruction of renewable energy sources for public buildings,
- construction and reconstruction of renewable energy sources to ensure the supply of system energy in the public sector,
- replacement of unsuitable combustion sources for solid fuels and optimization of their operation

The expected contribution is to increase the capacity to produce energy from renewable sources, which will contribute to achieving the national target for the share of renewables in final energy consumption. At the same time, these activities contribute to reducing emissions of greenhouse gases and pollutants. Public entities are the main target group.

The first call of OP Environment 2021 - 2027 is expected to be launched in May 2022.

1.2.2 Link to the RIS3

<u>The National RIS3 Strategy</u> for the Czech Republic is called the <u>National Research and Innovation Strategy</u> for Intelligent Specialization of the Czech Republic 2021–2027. The topics of the LC DISTRICTS regional action plan connected with the RIS3 strategy are evident cross-sectionally throughout the strategy:

The most important key trends in terms of the National RIS₃ Strategy include, in particular, **"new technologies, climate change, depletion of natural resources** and demographic change and **urbanization**". (Page 9)

In its specific objective A.1 Strengthening the innovative performance of existing companies and the response to industrial transformation, technological and societal change, it is mentioned, inter alia, among the standard activities **"Supporting investment in technology**... not only in industry but also in other sectors and sectors - such as energy, transport, **construction**, agriculture, etc.)". (Page 45)

RIS₃ also explicitly states that "... another thematic unit... is **the use of energy in the residential and non**residential buildings sector (increasing energy efficiency; using mainly passive elements within the building itself or the interior parts of the building leading to energy savings; passive or active buildings, the use of low-emission technologies for local production of electricity or heat and its integration into the basic elements of buildings, etc.)". (Page 77)







1.3 Main findings from the Regional diagnosis

In 2016, the Czech non-governmental organisation Chance for Buildings published two studies: of residential and non-residential buildings stock in the Czech Republic to determine the possible savings of final energy consumption for the housing stock of the Czech Republic and the investment demand of achieving these savings.

The resulting 21 recommended measures were divided into five categories

- Political measures (2 measures): implementation of energy saving scenarios into the energy concept and implementation of this strategy into other national concept documents
- Economic measures (7 measures) representing various financial instruments to support the transition to energy-efficient building funds, the possible obligation of energy providers to save energy for end users or energy-efficient social housing
- Legislative and administrative measures (5 measures) emphasizing compliance with energy standards for buildings for renovation, certificates of energy consumption of buildings, tax advantages, coherence of legislation and the system for reporting energy savings
- Educational and counselling measures (3 measures) emphasizing the need for energy efficiency education at all levels of the education system, the need for research progress to make better use of energy and strengthening the role of state-controlled counselling.
- Climate change adaptation measures in buildings (3 measures) aimed at reducing overheating in buildings, ensuring quality ventilation, and supporting green infrastructure.

To meet the Czech Republic's emission commitment, it is necessary to reduce the annual national production of emissions by 73.8 Mt CO₂ by 2050 compared to the initial model year of 2016. Assuming a balanced share of industry sectors in reducing greenhouse gas emissions, the national climate commitment for the building fund in 2050, which amounts to 11.4 Mt CO₂, was calculated. The most recent study calculated "Potential for reducing operating CO₂ emissions from the Czech building stock" according to different renovation scenarios was published in May 2020, jointly co-authored by CTU UCEEB and Chance for Buildings.

The latest review on heating consumption is available for 2018. It summarizes the heating and cooling denominator for the years 2010 – 2018. Due to the increasing floor area caused by new construction, the effect of refurbishment of the existing building stock is not visible. The share of renewable energy however is rising according to the report (from 14 % in 2010 to 21 % in 2018). Most of the energy ended up in residential buildings (48 %). Services have consumed 24 % of the energy for heating and the industry 27 %. Comparing the annual energy consumption in residential buildings, it has decreased by 6 % between 2017 and 2018.

Financial resources

Operational Programmes have so far represented the most important source of funding in the Czech Republic. In 2014 – 2020 the funds to energy efficiency (EE) increased twofold in comparison to the 2007-2013 programming period, from over 1 billion EUR to 2.4 billion EUR (about 10 % of total allocation in the Czech Republic.¹

¹ Valentová (2018), Evaluation Of Energy Efficiency Policy Instruments.







Measure / Building	Residential homes	Apartment buildings	Public buildings	Commercial/industrial buildings
Retrofit in the City of Prague	<u>New Green Savings</u> <u>Programme</u>	<u>New Green</u> <u>Savings</u> Programme	OP Environment OP Prague	<u>Czech-Moravian Guarantee and</u> <u>Development Bank – ENERG</u> (<u>Prague</u>)
Retrofits outside Prague	<u>New Green Savings</u> <u>Programme</u>	Integrated Regional OP (IROP)	OP Environment	OP Enterprise and Innovations for Competitiveness (OP EIC) Czech-Moravian Guarantee and Development Bank – ENERGY SAVINGS (outside Prague)
Energy source replaceme nt/exchang e	OP Environment ("regional boiler funding") New Green Savings Programme	IROP New Green Savings Programme	<u>OP</u> <u>Environment</u>	OP EICCzech-Moravian Guarantee andDevelopment Bank – ENERG(Prague)Czech-Moravian Guarantee andDevelopment Bank – Energysavings (outside Prague)
Other	EFEKT	EFEKT <u>Panel 2013+</u>	<u>EFEKT</u>	EFEKT

In the above-mentioned programmes, the level of subsidy differs and is mostly between 30% to 70% subsidy, depending on the type of beneficiary, location, measures implemented, saving achieved, method used.

Modernization Fund

The list of financial resources must also include the newly created Modernization Fund, which did not exist at the time of the development of the LC DISTRICTS Regional Diagnosis. In 2019, the European Commission presented a strategic vision called the <u>A European Green Deal</u>, into which the Modernization Fund was integrated. The aim of this growth strategy is to transform the EU into a fair and prosperous society with a modern and competitive resource-efficient economy that is carbon neutral in 2050 and in which economic growth is decoupled from resource use. The elements of the <u>A European Green Deal</u> partially implemented by the Modernization Fund are in particular:

- supply of clean, affordable and secure energy,
- > reducing greenhouse gas emissions and increasing energy savings and energy efficiency,
- > construction and renovation of buildings with efficient use of energy and resources,
- > accelerating the transition to sustainable and clean mobility.

The Modernization Fund is intended to support investment in the period 2021 to 2030 in line with the objectives of Directive 2003/87 / EC and also in line with the objectives of the EU policy framework on climate and energy policy until 2030. These objectives are also closely linked to long-term objectives. objectives expressed in the Paris Agreement and the United Nations Framework Convention on Climate Change.





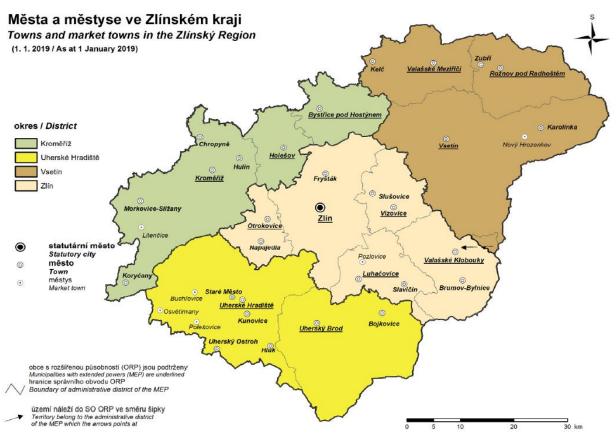


Among the programs of the Modernization Fund, which concern the thematic focus of the LC DISTRICTS project, which may be affected by the conclusions of the LC DISTRICTS project from the point of view of public buildings, are, among others, the following programs:

- Energy efficiency in public buildings and infrastructure support for comprehensive measures to improve energy efficiency and the use of renewable and low-emission resources in public buildings, state buildings and public infrastructure
- Community energy support for open energy communities established to meet their energy needs (the main purpose is not to make a profit).
- > New renewable sources in energy support for projects of new non-fuel renewable energy sources

Zlín Region

The Zlín Region, as the administrating authority on the NUTS 2 level, approves strategic documents, provides methodological support to both its organizations and representatives of 292 municipalities (local governments). Between the level of the region and the municipality, there are still 15 cities (ORP, municipalities with an extended competence – market towns) performing activities associated with an extended power of municipalities.





The Zlín Region, with the help of strategic documents and its own organization (Energy Agency of the Zlín Region, for instance), has the opportunity to exert influence on the transition to low-carbon technologies,







not only in all towns and municipalities in the region, but also in its own organizations and organizations established and founded by local governments.

The instrument for enforcing the energy policy of the region is the Regional Energy Concept (ÚEK) defined by Act No. 406/2000 Coll. on energy management. ÚEK is based on the State Energy Concept and is developed by the regions at their own expenses.

According to the conclusions of the first ÚEK approved in 2004, the Zlín Region was one of the less developing. The envelopes of public sector buildings were in poor energy standards, often unheated, and heat sources were oversized with outdated technology. The development scenarios of the concept assumed an increase in energy in all sectors.

Energy efficiency increases not only in the source part, but also in the buildings themselves. Higher efficiency could be achieved by further improving spatial planning for the construction of new and renovation of original houses.

There are not any specific energy efficiency trends on the regional level that would fundamentally affect developments in the regional construction sector. A huge advantage of the region over other regions is the existence of an active and capable regional energy agency, which provides its services to municipalities, consults municipal plans, helps them prepare renovation and construction projects, oversees the proper implementation of proposed measures, and evaluates their impacts. It is the only agency of its kind in the whole Czech Republic.

Since 2011, subsidy titles such as Green for Savings, New Green for Savings, Boiler Subsidies and IROP have been launched for households, which aimed to remove coal consumption from households. By using subsidy programs, it is possible to promote low-carbon technologies in central heating sources, in construction and in transport. EU funds have been and still are an important opportunity for the Czech Republic to reduce energy consumption. In particular, support for the improvement of thermal technical properties of public buildings, replacement of heat sources and hot water, the use of RES.

In its activities, the Energy Agency applies the conclusions of the regional energy concept (the first one was completed in 2004 and in 2014 it was updated) and completes its objectives. Using examples of good practice, it shows suitable ways of energy conscious renovation of buildings, central and decentralized heat sources, application of RES in both buildings and transport, sustainable spatial planning in the context of 3Denergy management enabling construction of passive buildings, zero standard buildings and energy active buildings.

For this purpose, EAZK organizes awareness campaigns, workshops, conferences free of charge and also methodically leads, motivates (competitions) and prepares project applications for subsidies from EU funds for major players in the region, cities and municipalities for investment projects leading to energy savings, efficient management energy and the transition to a low-carbon economy in general in all sectors. The EAZK activities are pre-financed and co-financed by the region in addition to the grants that EAZK also secures for its activities from EU funds.







2 Part II – Methodology

The development of the action plan for the Zlín Region was based on two complementary approaches:

- 1. interregional European cooperation between LC DISTRICTS partners
- 2. participation of key actors at regional and national level who are directly or indirectly involved in the process of promoting energy efficiency in public buildings

Both approaches have resulted in a process of strategic thinking and defining relevant objectives and possible solutions in the framework of regional diagnostics and a draft action plan, which aims to identify synergies and complementarities between different policy and financial instruments to create a regional action plan to facilitate the transition to low-carbon districts and to influence the instrument of the OPE 2021–2027.

2.1 Interregional approach and conclusions

Interregional events took place in Navarre (Spain, September 2019), Marche (Italy, October 2020), Smaland (Sweden, December 2020), Zlín (Czech Republic, January 2021) and Croatia (March 2021) and included building renovation initiatives, construction of energy efficient buildings, creation and renovation of district heating and other urban renewal events in the regions. These events also included study visits related to these topics and workshops on examples of good practice (peer review).

Due to the unfavourable epidemiological situation, visits to Italy, Sweden, the Czech Republic and Croatia had to be made online. Especially examples of good practice in the field of building renovation and construction of energy-efficient buildings, were important and inspiring for the Czech partners in the process of regional strategic thinking. However, the examples concerning the creation of climate action plans were in many respects inspiring for the Czech side, too.

The following examples of good practice, which were also submitted for approval to the "Policy Learning Platform" of the Interreg Europe program, were the basis for regional strategic thinking in the Czech Republic. Their focus was mainly on building renovation projects (in some cases focused on specific segments of the population) and funding schemes.

Lourdes renove - Navarra, Spain

Lourdes Renove was a European project developed in the Lourdes social district of Tudela (Navarra) between 2010 and 2011. The project carried out an integral refurbishment of residential buildings in the area, including the renovation of heating networks and the replacement of boilers in the San Juan Bautista area. The best aspects for transfer / replication for the Czech partners of LC DISTRICTS were found

- ambitious scope of the project,
- three different types of interventions (district heating, urban renovation and energy efficiency improvement) carried out within two years, including planning, public procurement and construction / renovation activities
- integration of energy renovation of buildings and renewal of district heating as a common process.







The initial setting of monitoring indicators for implemented projects, as well as the criteria of success, was particularly inspiring and important, because it was a smart combination of more important measures. In such projects, it is also important to consider which phases to fully finance from public budgets and what to leave to owners and residents.

Efidistricts - Navarra, Spain

Efidistrict, a project aimed at integrated energy regeneration of the Txantrea housing estate in Pamplona, is implementing a regional strategy against climate change with the support of energy saving measures and the use of renewable energy sources (biomass). In addition, it is looking for a new energy model to combat fuel poverty and improve the living conditions of the inhabitants of these neighborhoods.

This project has clearly shown the important role that local authorities play in building citizens' trust for project implementation. The level of involvement and all aspects of the planned actions, including the financial implications, need to be carefully communicated. Ongoing projects in other neighborhoods suggest that one successful project increases trust and inspires other communities to follow.

<u>NSH – Navarra, Spain</u>

As part of the EU-funded Navarra Social Housing project, the government of the Spanish Autonomous Community of Navarre has begun construction of 524 social housing units. The buildings are designed in accordance with the highest energy efficiency standards in order to minimize tenants' energy consumption and protect the environment.

With regard to the improvement of the Czech policy instrument within the LC DISTRICTS project, it once again proved that the current support from the OP Environment (CZE) for passive houses in the amount of 30% is insufficient under the related conditions. This needs to be changed to increase the attractiveness of passive houses for investors to build passive houses in the climatic conditions of the Czech Republic. Also, support for the construction of new public buildings to low-energy standards different from passive houses is not supported at all by the OP Environment even though not all new public buildings are able to meet the requirements for passive houses with regard to location and other circumstances. The very fact that the municipality supports the construction of social housing in the standards of passive houses in contrast to the "standard regulations" shows the courage and progressive thinking.

Joint SEAP – Marche, Itálie

The Joint SEAP means a Sustainable Energy Action Plan for a group of municipalities from the Marche region. It refers to a plan implemented jointly by a group of neighboring cities, which allows them to achieve more effective results than in the case of isolated action plans.

In this case, 11 small local authorities shared climate commitments under the Covenant of Mayors. They have been involved in the development of a common SEAP, with a common commitment to reduce CO2 emissions by at least 40% by 2030.

The most interesting aspect that the Czech partners found in this example was the ability of a larger number of municipalities to find a common approach and to unite in many times contradictory interests in specific municipalities in a period beyond the election period.







As a potential for transfer of experience, it would be necessary to carefully examine how the objectives set by the Joint SEAP are linked to specific planned actions - for example, which specific planned measures are linked to the ambitious goal of reducing CO₂ emissions.

A functional portfolio of different financial instruments is indeed a necessary condition, but the same importance should be attached to establishing long-term cooperation between municipalities and between municipalities and regions, regardless of politics beliefs, with the main focus on long-term environmental, energy and socio-economic sustainability in decision-making processes.

Energy and climate planning: Harmonization of SECAPs with spatial planning and zoning – Croatia

The city of Karlovac will develop the first Croatian green territorial and zoning plan, which will include the energy and climate measures set out in its SECAP (Sustainable Energy and Climate Action Plan). This action will make use of an existing instrument with which city officials have experience, enrich it with mandatory energy and climate measures and explicitly and bindingly define sustainable development goals.

The most interesting aspect of the presented example for Czech partners was the inclusion of climate measures in the action plans. From this point of view, we are at a starting point in including mitigation and adaptation to these plans.

The challenge for both the Croatian and Czech sides remains to link the proposed SECAP measures with spatial planning, as SECAP measures are not legally binding.

Växjö City Hall & Central Station – Sweden

Växjö City Hall and Central Station is a wooden building made of potentially zero-emission wood, thanks to its wooden construction, the installation of heat pumps and PV systems, together with a sustainable urban drainage system. The project would reduce the cost of annual rent by EUR 0.5 million compared to the renovation of the existing town hall.

During the online study visit, City Hall was in the process of construction, but this project demonstrates the possibility of combining renewable and local materials with advanced and energy efficient technologies not only to improve the indoor environment but also to reduce energy consumption, costs and environmental impacts.

This project is an inspiration for Czech partners to influence the instrument of the OPE 2021–2027 using functional examples from elsewhere - both in terms of ambitions, materials used and a comprehensive approach to the whole area. The project strives for the highest Swedish environmental certification.

The project envisages a number of inspiring measures and outcomes:

- The new town hall creates a better working environment for employees.
- The existing municipal building will be renovated and converted into a 250-apartment residential building, thus helping the city of Växjö to address the shortage of residential housing (especially rental housing).
- Provides options for 800 parking spaces in the city centre.
- Contributes to reducing CO2 emissions in Växjö.







Matrix of challenges and solutions

Part of the interregional approach was also the creation of a matrix with the challenges found in the Czech Republic and the Zlín Region in one axis and their solutions in the other.

In order to create the matrix, these challenges and solutions were extracted from various sources during the experience exchange process within the LC DISTRICTS project. Challenges are obstacles to achieving the desired results, the need for change, room for improvement..., etc. The solutions are new measures, room for new action, better governance, new ways to achieve the desired goals, etc.

The matrix of challenges and solutions developed within the interregional strategic thinking of the LC DISTRICTS project is a part of the chapter 2.3 - Process of regional strategic thinking.

2.2 Regional approach. Stakeholders

In order to meet the principle of participation of the most relevant stakeholders from the Zlín Region and the national level, which play a role in promoting energy efficiency in public buildings, the meeting of local key players (LSGs) was held in 4 waves during the first phase of project implementation. Representatives of all 3 participating groups identified at the beginning of the LC DISTRICTS project were involved in these meetings.

- strategic and policy framework, level of managing authorities
- framework of service groups, intermediaries, designers, architects, engineers, auditors
- social level, citizens, public, users

As an important circumstance, it is important to mention that members of the Monitoring Committee for the OP Environment were also involved in these groups, for example from the National Network of Local Action Groups in the Czech Republic or from the OP Environment itself. The Monitoring Committee supervises the program by continuously monitoring the program, evaluating its implementation and progress towards the programme's objectives.

Representatives of towns and municipalities of the Zlín Region as well as representatives of other key groups from the Zlín Region also participated in regional seminars organized by Czech partners of the LC DISTRICTS project, where knowledge and experience were transferred, shared and identified and recommendations for the improvement of the relevant priority axis of the OP Environment were formulated.

On the regional level, a total of 4 waves of regional seminars of key entities took place:

First wave

The first wave presented the current state of preparations for the OPE 2021 - 2027. The first proposed changes by the Ministry of the Environment compared to the OPE 2014 - 2020 were outlined, the possibilities of combining grants and EPC were discussed as well as complex development of large-scale projects. The basis for gegional diagnosis was also defined and discussed.







Second wave

Due to the pandemic situation in the Czech Republic, it was not possible to organize seminars and workshops in the presence of a large number of participants, so the format of meetings in small stakeholder groups was chosen. EAZK representatives met with various stakeholders. Each meeting began with a detailed introduction to the current version of regional diagnostics. Then, the participants' attention was focused on part 5 of the document, which summarizes the main ideas that regional diagnostics brings. It provides an overview of the monitored process and reveals key findings of the LC DISTRICTS project. Last but not least, this part forms the basis for the creation of a regional action plan.

Third and fourth wave

With the help of the third wave of regional workshops, which were organized in small groups or online due to the continuing unfavorable pandemic situation, the Czech project partners started the process of regional strategic thinking leading to the elaboration of draft regional action plans. Based on the regional diagnostics, the partners discussed the required analysis to identify the most appropriate examples of good practice for transfer from other regions, including possible synergies and complementarities for the development of a systemic regional action plan.

In the fourth wave, the strategic thinking process was completed by the partners and the final content of the regional action plan was agreed.

The process of consulting the new OP Environment 2021 – 2027 elements as well as the content of RAP also took place within the project **Community and Local Energetics (KLE)**, managed by the Energy Regulatory Office of the Czech Republic, led by the ERU – Energy Regulatory Office of the Czech Republic. The Director of EAZK is a Vice-Chairwoman of Working Group 3 "Data" within this project . As part of the KLE meetings, representatives of the Ministry of Industry and Trade, the Ministry of the Environment, the Ministry of Regional Development, the Energy Regulatory Office of the Czech Republic and the State Environmental Fund consult on measures and legislative steps to increase energy savings in all sectors through videoconferencing at the national level.

Overview of subjects whose representatives participated in local stakeholders' meetings in 4 waves of regional workshops according to the categorization from chapter 3 of the regional diagnosis:

Group of stakeholders	Subject
	SFŽP – State Environmental Fund
stants of a state first	Ministry for regional development (as a part of KLE)
strategic and policy framework, level of managing authorities	Chance for buildings (member of OPE Monitoring Committee)
managing autionties	Ministry of Environment (as a part of KLE)
	Ministry of Regional Development (as a part of KLE)







	Energy Regulatory Office of the Czech Republic					
	Porsenna (energy consultancy company)					
	Cl ₂ (non-governmental non-profit organization focused development)	on sustainable				
framework of service groups,	Association of electric car industry					
intermediaries, designers, architects, engineers, auditors	Naviga 4 (grant consulting company)	NAVIGA ⁴				
	Frontier technologies					
	4e consulting (evaluation of public procurement)					
	Domy sobě (SMART solutions in housing)					
	Tehos Otrokovice (facility)	M TEHOS				
	National network of local action groups (member of OPE Monito	oring Committee)				
	Zlín Region					
	State energy inspection					
	Uherský Brod (municipality)					
	Teplárna Otrokovice (facility)					
	Valašské Meziříčí (municipality)					
	Otrokovice (municipality)					
	Rožnov pod Radhoštěm (municipality)					
	Valašské Klobouky (municipality)					
social level, citizens, public, users	Zlín (municipality)					
	MAS Buchlov (local action group)					
	Kunovice (municipality)					
	MAS Luhačovice (local action group)					
	MAS Východní Slovácko (local action group)					
	Suchá Loz (municipality)					
	Brno (municipality)					
	Zubří (municipality)					
	Bařice – Velké Těšany (municipality)					
	Hluk (municipality)					







2.3 Process of regional strategic thinking

During the meeting of local working groups and the process of regional diagnostics, the needs of different levels of the process of creation, implementation and administration of projects supported by the OPE instrument were identified, which form one of the starting points of the proposed actions in Chapter 3 of this document. Needs defined according to individual levels and an outline of their solutions:

Level of strategic and policy framework and managing authorities

There are major changes in the area of operational programs, where the national level often gives the impression of a remote centre with a lack of ability to understand the real needs of municipalities and cities. Regional energy concepts are often created in a non-conceptual way and the Ministry of Trade and Industry does not consult its state model of energy concept. At the same time, cities and municipalities are facing needs

- development of methodologies for the introduction of low-carbon technologies
- Incorporation of principles for the implementation of low-carbon technologies into the spatial plans of towns and municipalities, regions and into all strategic documents
- introduction of a system for evaluating the development of towns and municipalities, the region in accordance with the trends of sustainable development
- targeted support of RES

The challenges for the level of the strategic and policy framework are in particular:

- Motivation of city and municipal leadership and presentation of type examples and pilot projects, where local authorities often have a high degree of enthusiasm, but also a low degree of specific own initiatives
- requirements reducing energy demand are among the most demanded subsidy titles, but priorities change according to the current offer, often purposefully
- Large investment projects supported by subsidy titles often increase energy consumption, due to new functionalities and modernizations compared to the original state (new showers, heated garages, etc.)
- > The segment of building thermal insulation in rural areas is gradually saturated
- When creating programs, the resource part is not considered much what is the energy potential in the place and locality, savings are solved primarily, resources are solved less

Service groups framework

Among the needs defined within the service groups, which include intermediaries, designers, architects, engineers, auditors the following needs were identified as important:

- Awareness raising of political representatives
- development of cooperation between the public and private sectors, including individual citizens
- Training of officials
- Targeted support for RES
- Development of community energy







Among the challenges this level is currently facing are, in particular

- > Preparation of quality local projects to meet goals envisaged in strategies
- Elaboration of quality plans and strategies (analysis, design part, program framework), which is often a task for municipalities and LAGs beyond their capabilities, abilities, and capacities
- > Need for deeper analyses in renovation planning vs. new construction
- > Consideration of the PV plant potential, ideally in connection with thermal insulation
- Low limit for obtaining a license for a PV power plant (10kW) and related excessive administrative burden for small operators
- > Perplexity of subsidy programs

Social level, users, citizens, public

This level still provides great scope for developing services to citizens in independent energy advisory, whether in the process of meaningful user-level planning, expanding the existing breadth and portfolio of financing for building renovation and construction of energy efficient buildings or developing educational platforms, including presentations of case studies and pilot projects.

Among urgent challenges at this level belong

- Motivation of users for conscious modernization of buildings and their support from citizens in the implementation of energy saving measures
- > Limited budgetary resources and professional capacity
- > Decrease in population in municipalities in contrast to the increase in built-up area
- The reproduction cycle of the city's property is often too long for the municipality to start another one earlier than 15-20 after the last one
- > Alternative ways of financing
- > A significant part of citizens is negative about subsidies due to the possibility of corruption

Other needs for adaptation of the OPE 2021–2027 cross-sectionally for all levels

In order to change the OPE instrument in the area of 1.1 Support for measures in the field of energy efficiency and 1.2 Support for energy from renewable sources so that it is beneficial for the region, it is also necessary to test modelling of buildings and possibilities of using RES, which installations are necessary to meet legal conditions.

Until now, applications for renovation of buildings have been submitted in the Czech Republic according to individual measures and according to the amount of financial support. Thus, for one building, applications were submitted for insulation of the building (replacement of windows), doors, insulation of the perimeter cladding, roof, floors with a support rate of 40 to 50%. The second application was for the replacement of a heat source with a a support rate of 40 to 60%, the third application was for the installation of PV and recuperation to ensure the quality of the indoor environment with a support rate 70% and the fourth application was for green roofs and rainwater accumulation from the roofs with a support rate 85%.







The operation of the SM2014 + subsidy system then requires entering and creating the same documents several times and then distributing them again, according to the amount of investment and the level of subsidy to individual projects and reporting for the entire sustainability period of 5 years from the end of the final evaluation.

Efforts need to be made to change the system so that all measures can be applied for in a single application and the supported measures extended to the modernization of existing heating system systems older than 20 years. In order to promote these conceptual renovations and the construction of new intelligent buildings, more pilot examples are needed. EAZK also considers it important to have a higher level of support for projects with a comprehensive solution, including measures to adapt buildings to climate change with comprehensive solutions.

The existing support of the OPE instrument is determined by eligible costs per m2 of insulated areas, m3 of recuperated air, installed capacity and output of the heat source and RES in the amount of 30 to 50% of these eligible costs. For new buildings in the passive standard, the support is set at 30 or 32% (for municipalities with higher air pollution) of all eligible costs associated with the construction of the building (excluding parking lots, landscaping, communication lines...) and a maximum of CZK 50 million. to support the cost of the passive standard of buildings. EAZK claims that 30% is not enough for these public building projects and the limit needs to be increased to 50% and the Ministry of the Environment proposes to limit this limit with a maximum amount of CZK 100 million. EAZK has ambitions to enforce 85% support CZK 200 million and in municipalities with a population of over 3,000 inhabitants with a 50% subsidy also with a maximum limit of CZK 200 million, in order to support smaller municipalities and motivate their inhabitants to stay in these villages, find work here and take care of the local landscape. When the examples are in the form of municipal buildings, the whole municipality will develop in this sense.

A comprehensive solution for development planning, proper urban planning, adaptation to climate change will significantly reduce CO₂ emissions and save energy in the region. The final consumption of buildings can be reduced by another min. 20%. At present, after the renovation of buildings with a subsidy, energy savings are usually between 45-75%. If there are no subsidies for projects, the energy savings are usually a maximum of 20%. Exemplary conceptual renovations can achieve up to 80% energy savings over the current state.

Matrix of challenges and solutions

The next step in the process of regional strategic thinking was the creation of an overarching matrix of challenges and their solutions arising from the interregional approach described in Chapter 2.1. The following matrix for the Zlín Region came from

- conclusions of the regional diagnosis of the Zlín Region,
- peer reviews of LC DISTRICTS project partners in the framework of sharing examples of good practice and study visits,
- four waves of regional workshops of key stakeholders in the Czech Republic.







TYPE OF GGPP		STR	TOOL	PROJ	PROJ	LEG / FIN	TOOL	LEG / FIN
Topic	Challenge / solution	Energy agency as a coordinating and cross- cutting planning body	Monitoring of the retrofitted buildings. Wide range of parameters	Choosing high energy demand buildings to implement energy efficiency activities	New public buildings in NZEB standards	Energy communities	GIS Tool: buildings classification by economical and energetic vulnerability	EPC, ESCO
	lack of citizen awareness	х	х	х	Х	х	х	х
	lack of technical knowledge / limited access for technical teams	Х	х		х		х	
Demand	Ignorance of their own buildings' characteristics (energy performance)	х	Х	х			x	
	Finance	x	х		х	х		
	Need of definition of the governance model	Х				х		Х
Supply	Need to boost energy efficient retrofitting from all administrative levels: regional and local	х					x	
	Lack of a coordination entity	х		x		х	x	
	Lack of well-trained technician teams		х	х	х			х







TYPE OF GGPP		STR	TOOL	PROJ	PROJ	LEG / FIN	TOOL	LEG / FIN
Торіс	Challenge / solution	Energy agency as a coordinating and cross- cutting planning body	Monitoring of the retrofitted buildings. Wide range of parameters	Choosing high energy demand buildings to implement energy efficiency activities	New public buildings in NZEB standards	Energy communities	GIS Tool: buildings classification by economical and energetic vulnerability	EPC, ESCO
	Lack of a comprehensive and cross-cutting vision	x	х	х	х	х		x
	Lack of a starting point diagnosis	х		х			x	
	Lack of clarity in the mandatory regulations concerning Energy Efficiency and integration of RES	x			x	х		
Administration	Need to plan a medium/long term strategy to EE and urban regeneration	x	х	х		х	x	
	Development of a comprehensive and coordinated aids framework of all administrations involved in the energy transition.	x	Х	х			x	Х
	Definition of new stable financing models	х		х	х			







TYPE OF GGPP		STR	TOOL	PROJ	PROJ	LEG / FIN	TOOL	LEG / FIN
Торіс	Challenge / solution	Energy agency as a coordinating and cross- cutting plannifying body	Monitoring of the retrofitted buildings. Wide range of parameters	Choosing high energy demand buildings to implement energy efficiency activities	New public buildings in NZEB standards	Energy communities	GIS Tool: buildings classification by economical and energetic vulnerability	EPC, ESCO
	Sustainable, affordable and secure energy supply		х		х	Х		х
Other partners' diagnosis	To identify the interventions which outcome is the highest environmental, social and economic positive impact	x	x	x	х			
	Assessment of the carried-out projects in terms of sustainability and environmental impact	х	х	×	х	х		
	Assessment of the carried-out projects in terms of EE. Concrete and detailed data	х	х	x	х	Х		х
Peer Review	Assessment of the carried out projects in terms of performance and cost	х	х	x	х	×		×
	Establishment of criteria to select global interventions areas	х	х	x	х			
	Score	18	14	14	13	11	8	5







2.4 List of relevant objectives and possible solutions

List of main needs obtained from regional diagnostics and regional strategic thinking for the Regional Action plan of the Zlín Region for the support of energy efficiency in public buildings.

Necessity	Solution
Goal1: Reduction of final energy consumption in public buildings	Create a map of the process of approach to the management of public buildings and ensure that OPE funds contribute to a rapid and comprehensive renovation that increases energy efficiency. If necessary, consider the use of RES. Professional monitoring and evaluation of individual measures and definition of more complex energy standards for individual categories of buildings owned by the region and municipalities, including the inclusion of energy-conscious behaviour of building users. Implicitly defined support for capacity building and maintenance at the regional level would be beneficial for the preparation of quality projects and the subsequent involvement of users in the energy management process.
Goal2: Increasing the number of approved projects	Define, set up and monitor project administration, processes needed at the regional level to prepare quality EE projects, provide professional advice and support to applicants, define a better allocation of funds for integrated EE + RES measures so that the tool supports comprehensive solutions with greater impact. Another challenge is to cover more applicants with the same level of budget and to secure project funding for more diverse projects.
Goal3: Adapt existing tools to regional and local conditions	Define proposals for improving the existing online monitoring system, in order to reduce the time and limited professional work capacity needed for the preparation, management and implementation of projects, including improving the management of monitoring and evaluation procedures. There is a consensus among all stakeholders that multilevel cooperation in the implementation, monitoring and verification of energy efficient measures is the key for achieving an energy efficient energy transformation. A combination of investment and non-investment support can be the key to unlocking the potential of EE measures in public buildings.







3 Part III – Actions

This part presents the actions contained in the Regional action plan for the Zlín Region in order to influence the OPE instrument 2021–2027. The proposal for each action met the following criteria:

- Inputs of key stakeholders actions are focused on solving specific regional challenges and needs identified during the regional workshops of phase 1 of the LC DISTRICTS project implementation.
- **Interregional learning** actions are focused on drawing on the experience gained from interregional exchange activities carried out within LC DISTRICTS.
- Improvement of the policy instrument actions focus on achieving improvements in the OPE 2021 2027 in the area of support for energy efficiency and energy from renewable sources
- **Feasibility** a limited number of actions have been defined and their scope revised to increase the likelihood of their implementation without compromising the purpose of the Regional Action Plan and the LC DISTRICTS mission.

The action plan for the Zlín Region includes the following actions:

A1. Promoting of new projects supporting the energy efficiency in public buildings

Goal	Action 1
Goal 1 - Reduction of final energy consumption in public buildings	х
Goal 2 - Increasing the number of approved projects	Х
Goal 3 - Adapt existing tools to regional and local conditions	Х

The table below shows how the action meets the objectives set out in the Action Plan:





3.1 Action 1: Promoting of new projects supporting the energy efficiency in public buildings

3.1.1 Relevance to the project

3.1.1.1 Stakeholder input

The action actively seeks to address the findings of all waves of interregional workshops and contributions from stakeholders on the part of users, service groups and administrative authorities to facilitate the implementation of investment projects supported by the OPE and to increase awareness of local entities about grant titles and identify implementation problems and their possible correction in the OP Environment. The implementation of the action responds mainly to the requirements to increase the motivation of the management of cities and municipalities to implement more demanding investment projects, where municipalities, in particular, often have a considerable degree of enthusiasm, but do not have sufficient capacity to implement them.

Another aspect to which Action 1 responds is the fact that more demanding investment projects supported by subsidies often increase energy consumption due to new functionalities and modernizations compared to the original state. Greater emphasis will also be placed on the resource part, not just in isolation to achieve savings. The potential of the use of RES will also be taken into account more when designing energy efficient measures.

Action 1 also responds to the needs of developing public-private cooperation and seeks to motivate applicants to consciously modernize buildings and their energy saving measures while having limited budgetary resources and professional capacity.

3.1.1.2 Interregional learning

The process of interregional learning and examples of good practice suitable for the transfer of experience are described in detail in **Chapter 2.1 interregional approach and conclusions**. The most important best practices presented by partners for the transfer of experience for the implementation of Action 1 in the Zlín Region were the following:

- Lourdes Renove Navarra for its complexity, ambitious scope of integration of energy renovation of buildings and renewal of district heating and combination of different types of interventions (district heating, urban renovation and energy efficiency improvement) including planning, tendering and construction activities
- Efidistrict Navarra especially for illustration of the important role of local authorities in building users' confidence in the implementation of projects, where users were still carefully informed about the level of involvement and all aspects of planned actions, including financial implications
- Växjö City Hall and Central Station to illustrate a successful functional example of combining state-ofthe-art materials and design with the highest energy standards for public sector buildings







- NSH Navarra for the courage and progressive thinking towards the enforcement of above-standard requirements in the field of construction of new passive buildings in the public sector
- Joint SEAP Marche for its ability to find common ground for a larger number of actors, which may also have conflicting interests, and to establish a long-term cooperation between actors with the main focus on long-term environmental, energy and socio-economic sustainability
- Harmonization of SECAPs with spatial planning and zoning Croatia for its zoning plan including the energy and climate measures set out in its SECAP and its efforts to mainstream zoning into energy efficiency strategies and programmes

From the results of strategic thinking using a matrix of challenges and solutions created by LC DISTRICTS partners, Action 1 responds mainly to the solution that, according to the nature of Action 1, achieved the highest score. Particularly speaking about:

- the important role of the Energy Agency as a coordinating and cross-cutting planning body,
- a qualified selection of energy-intensive buildings to carry out energy efficiency activities,
- expert assessment of the construction of new public buildings in the NZEB standards classification of buildings according to economic and energy vulnerability.
- monitoring of retrofitted buildings using a wide range of parameters
- the important role of the Energy Agency as a coordinating and cross-cutting planning body
- building energy communities

3.1.2 Nature of the action

3.1.2.1 Policy improvement

The region and municipalities strive to increase energy efficiency, improve the internal environment and increase user comfort in their buildings, which include not only town halls and administrative buildings, but also schools, hospitals, cultural centers, sports halls, nursing homes, emergency services buildings, etc. The newly launched instrument OPE 2021 - 2027, which is the successor of OPE 2014 - 2020, can be improved by providing feedback on specific rules for financing calls under objectives 1.1 - Support for measures in the field of energy efficiency and 1.2 - Support for energy from renewable sources.

During the implementation of this action, the direct effects of financing from the OPE 2021–2027 will be seen in practice, when it is planned by the EAZK to submit at least 5 projects to the new and at the same time the first call of the OPE 2021–2027. **The first call is expected to be launched in May 2022**.

Currently the instrument of the OPE policy 2021 - 2027 is in constant preparation in the Czech Republic and its final version isn't expected to be available before submission of this action plan. The program covers all NUTS2 regions in the CR and concerns ERDF and CF. EAZK seeks to target the following findings and enforce proposals through the activities envisaged:







- Until now, applications for renovation of buildings have been submitted in the Czech Republic according to individual measures and according to the amount of financial support. Thus, for one building, applications were submitted for insulation of the building (replacement of windows), doors, insulation of the perimeter cladding, roof, floors with a support rate of 40 to 50%. The second application was for the replacement of a heat source with an aid intensity of 40 to 60%; the third application for the installation of PV and recuperation to ensure the quality of the indoor environment and 70% support rate and the fourth application for green roofs and rainwater accumulation from the roofs of aided buildings 85%. As a result, the operation of the SM2014 + subsidy system subsequently requires entering and creating the same documents repeatedly.

- Efforts need to be made to change the system so that all measures can be applied for in a single application. In order to promote conceptual renovations and the construction of new intelligent buildings, more pilot examples are needed. EAZK also considers it important to have a higher level of support for projects with complex solutions.

- The existing support of the OPE instrument is determined by eligible costs per m₂ of insulated areas and the output of the source in the amount of 30 to 32% and a maximum of CZK 50 million for support from the costs of the passive standard of buildings. EAZK insists that 30% is not enough for these public building projects and the limit needs to be increased to 50% with a maximum amount of CZK 100 million.

The Action 1 has therefore also the ambition to bring together relevant actors at local, regional, and national level and to support networking with regard to the importance of measures 1.1 and 1.2 of the OPE instrument 2021 - 2027. Problems will be identified through networking and possible changes of the new instrument will be aimed in further calls of the new OPE.

3.1.2.2 Activities

Within Action 1, EAZK will implement and coordinate the following activities

- I. Identification of suitable projects at the regional and municipal level for submission to the first round of the OPE 2021 2027 call, which is expected to be launched in May 2022. The starting point for this activity will be long-term knowledge of the environment and needs of municipalities, cities and regional organizations of the Zlín Region.
- II. Organization of consultations and workshops at the level of the region and individual municipalities for the purpose of specific proposals, taking into account the specifics of each case. These will be, in particular, concrete proposals for
 - a. insulation of building envelopes (insulation of ceilings, perimeter walls, floors, replacement of windows and doors)
 - b. change of heat sources, heating installations of RES for the production of heat and electricity for own consumption of buildings
- III. Coordinated discussion of proposed investment projects with the investor's representatives, assignment of design work leading to a transparent selection of designers and energy specialist leading to energy-conscious modernization of buildings or construction of new public buildings in a passive standard.







- IV. After approval of the project documentation and settlement of the building permit, EAZK will process the application for subsidies from the OPE instrument 2021 - 2027. In case there will be another suitable title with more suitable conditions for successful project implementation, the project may be submitted to another program, for instance to the Modernization Fund mentioned in chapter 1.3 Main findings from regional diagnostics. However, this fact will not have a negative impact on any of the 3 objectives of this action plan or on the improvement of the OPE instrument 2021 - 2027; on the contrary, there will be a better mapping and mutual synergy between the programmes.
- V. As part of the process of the modernization of existing buildings or construction of new buildings, EAZK will oversee compliance with the rules of contractor selection and individual materials recommended for these events, especially the parameters related to thermal conductivity and insulation thickness.
- VI. Implementation of energy management EAZK will lead the energy management of implemented projects in accordance with the requirements of the OPE instrument, this activity will be aimed at optimizing operating costs. Energy management will be conducted on a regular basis by monitoring electricity, gas, heat, and water consumption. The results of energy management will be analysed, and these will be presented to relevant subjects through EAZK communication channels. Analyses and presentations will focus on explaining the correct way of using RES, such as solar water heating, setting heating curves and regulation of heat sources and recuperation. Most users have outdated habits, try to overheat and reluctantly accept RES. For this purpose, it is very important to consult and compare the evaluation of similar buildings, eg. low energy vs. passive.

For public buildings, staff will be explained the need for energy savings and their impact on operating costs, which are very important for operators. EAZK will present clear and concise principles of economical behaviour and will strive to implement them in the operating rules of buildings - 1 x A4 of these recommendations will be developed. In terms of meeting the objectives of LC DISTRICTS, this activity will contribute to defining more comprehensive energy standards for individual categories of buildings owned by the region and municipalities, including the inclusion of energy-conscious behaviour of building users.

- VII. EAZK will lead the complete administration of projects submitted to the OPE instrument 2021 2027 for municipal and regional projects in the relevant subsidy system SM2014 +. It will submit related documents, monitor deadlines, and create documents for proper reporting of implementation and project results. At the same time, EAZK will consult all these activities with the relevant investors on the local or regional level.
- VIII. Aiming at changes of OPE measures 2021 2027 on the national level through appropriate platforms, which is currently, for example, the KLE project (community and local energy) managed by the Energy Regulatory Office of the Czech Republic and in which many important entities participate at the national level, including the Ministry of Regional Development, Ministry of Industry and Trade and SEF. The Director of the Energy Agency of the Zlín Region is the Vice-Chairwoman of the "Data" working group within the KLE project. Within this platform, it is possible to aim at changes in operational programs on the national level such as the amount of support for individual measures, maximum limits for PV installations, support for construction of new public buildings to low energy standards different from passive buildings, extension of support for reconstruction of heating systems, not just resources, etc. Within this activity, also an analysis of the service tool of the grant program will be performed (currently







it is SM2014 +) and knowledge will be collected for improvement from the user's point of view. Proposals will be defined to improve the existing online monitoring system in order to reduce the time and limited professional work capacity needed to prepare, manage, and implement projects, including improving the management of monitoring and evaluation procedures. All this will result in Official report sent to the State Environmental Fund with specific proposals for improving the OPE instrument (see section 3.1.7 Success indicators).

3.1.3 Stakeholders involved

- Energy Agency of the Zlín Region
- State Environmental Fund
- > Zlín Region and its organizations (schools, hospitals, nursing homes, etc.)
- > Towns and villages of the Zlín Region (municipalities)
- > Designers, architects, energy auditors
- > Other entities eligible to submit applications to the OPE 2021–2027, specific objectives 1.1 and 1.2
- Ministry of the Environment of the Czech Republic
- > Ministry of Industry and Trade of the Czech Republic
- Ministry for Regional Development of the Czech Republic

3.1.4 Time frame

February 2022 – January 2023

3.1.5 Costs

The costs of this Action need to be divided into 2 categories:

- Costs associated with the activities of EAZK in the coordination of activities leading to the submission of projects to the OPE instrument 2021 - 2027, with energy management, organization of consultations and project administration. These costs for Action 1 can be estimated to approximately 1 million CZK (app. 40.000 EUR).
- 2. **Investment costs** associated with the actual implementation of energy saving measures for public buildings, the amount of which will result only during the implementation of Action 1. However, tens to hundreds of millions of CZK can be expected, i.e. millions of EUR.

3.1.6 Funding sources

- The costs associated with the activities of EAZK will be fully covered within the budget of the EAZK, which is a stable non-profit organization of the Zlín Region with a fifteen-year history. The EAZK budget is provided on a contractual basis with the Zlín Region and on the basis of its own international projects in which EAZK participates.
- 2. Investment costs associated with the actual implementation of energy saving measures for public buildings will be covered from the instrument OPE 2021 2027 according to the applicable amount of support for individual projects at the time of application. Co-financing of investment costs beyond the support from the OPE instrument 2021 2027 will be implemented from the investors' own resources, ie. mainly cities, municipalities, and the Zlín Region. The amount of co-financing will only emerge during







the actual implementation of Action 1. However, the total costs can be calculated with tens to hundreds of millions of CZK, ie. with millions of EUR.

3.1.7 Success indicators for the action

- > Number of projects submitted to the OPE 2021 2027, or to another suitable instrument
- Number of approved projects within the OPE 2021 2027 focused on energy efficiency of buildings and energy from renewable sources.
- List of suitable projects in the field of energy efficiency and energy from renewable sources for submission to the next rounds of calls of the OPE instrument 2021 – 2027 or other suitable programs
- Official report sent to the SEF with specific proposals for improving the OPE instrument, including its administrative system and evaluation of difficulties identified in the implementation of the OPE instrument 2021 - 2027
- > Acknowledgment of receipt of the report by the SEF







3.2 Actions summary

Action title	Stakeholders involved	Time frame	Costs & Funding sources	Success indicators for the action
Action 1 Promotion of new projects supporting the energy efficiency in public buildings	 Energy Agency of the Zlín Region State Environmental Fund Zlín Region and its organizations Municipalities of the Zlín Region Designers, architects, energy auditors Other entities eligible to submit applications to the OPE 2021–2027 Ministry of the Environment Ministry of Industry and Trade Ministry for Regional Development 	02/2022 - 01/2023	Millions of EUR from the OPE instrument and the investors' budgets Costs associated with the activities of EAZK related to Action 1 in app. amount 1 million CZK covered by EAZK budget	 Number of submitted projects (10) Number of approved projects (5) List of suitable projects Official report sent to the SEF Acknowledgment of the report by the SEF





4 Part IV – Regional Action Plan Endorsements

The implementation of this action plan will be implemented by Energy Agency of the Zlín Region and monitored by the the Management Board of the Energy Agency of the Zlín Region, appointed by the Assembly of the Zlín region.

Date: ZLIN Place: 20101122 Jiří Částečka Chairman of the Management Board of the Energy Agency of the Zlín Region

ENERGEVICKÁ AGENTURA ZLÍN :KÉHO KI AJE, 3.p.c.

Tř. T. Bati 21, 76 90 žiln, IČ 27688313 DIČ: C227 5882 3 Letter of acknowledgement from the relevant organisation responsible for the policy

Project acronym	LC DISTRICTS
Project title	Towards low carbon city districts through the improvement of regional policies
Name of the singing organisation	Státní fond životního prostředí České republiky
Name of the singing organisation (English)	State Environmental Fund of the Czech Republic
Name of the policy instrument addressed	Operační program Životní prostředí 2021 – 2027 Specifické cíle 1.1 Podpora opatření v oblasti energetické účinnosti a 1.2 Podpora energie z obnovitelných zdrojů
Name of the policy instrument addressed (English)	Operational programme Environment 2021 – 2027 Specific objectives 1.1 Support for energy efficiency measures and 1.2 Promotion of energy from renewable sources
Name of the partner concerned in the application form	Energetická agentura Zlínského kraje, o.p.s.
Name of the partner concerned in the application form (English)	Energy Agency of the Zlín Region

Hereby we acknowledge

- That we welcome the content and actions of the Action Plan submitted to us by the project partner, as it contains appropriate and acceptable means to monitor and improve Policy instrument related activities
- That we are content to continue our cooperation with the project partner in Phase2 of the LC DISTRICTS project to further consider, discuss and take on board insights, expert information and market knowledge provided by the project partner for jointly monitoring and improving the management and the strategic focus of the Policy Instrument and its corresponding scheme conditions, following the Action Plan considerations

Name of Signatory: Bohdan Polak

Position of Signatory: Director of the Large Projects Implementation Department

Date: 19.1.2022

Signature (stamp)