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INTEGRATED ACTION PLAN FOR THE PROMOTION OF HEALTH-RESPONSIVE AND GREEN INFRASTRUCTURE IN SUCEAVA MUNICIPALITY

Document issued under the framework of

**the project „Health&Greenspace –Health-responsive planning and management of
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Programme**

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Preface

Health&Greenspace Action Planning Network links green infrastructure design and management to urban health policies and practices. Actions targeted by the network are linked to both physical changes to the urban environment and the promotion of social activities such as community, cultural, education and physical activity programs in green areas.

The Integrated Action Plan will be a result of works undertaken as part of the URBACT III „Health&Greenspace–Health-responsive planning and management of urban green infrastructure” project, further called “the project”. It is implemented by the Municipality of 12th District of Budapest (leader of the project) and 8 project partners (Espoo, Limerick City and County Council, Municipality of Messina, Municipality of Breda, Poznan, Santa Pola Council, Suceava, Tartu) forming a project consortium. Each of the project partners will develop a Integrated Action Plan for its city.

The aim of the Integrated Action Plan is to provide recommendations for the city’s authorities in terms of improvement of urban greenspaces which play an important role in improving social health and air quality and also contribute in reducing heat stress in cities and plan for implementing them. Furthermore, the Integrated Action Plan develops solutions and tools which once implemented in the city’s policy would contribute to an increase in Suceava’s attractiveness as a city stimulating the development of urban greenspaces, contributing to physical and mental health of the citizens.

The document takes into account at the same time the economic and the social dimensions of sustainable development. The development of the Integrated Action Plan was possible through the construction of a cross-sectoral network linking public institutions with the private sector and social organizations (URBACT Local Support Group). Another important factor contributing to the creation of the document was cooperation and exchange of experiences between the partners of the project.

The exchange of international experiences and involvement of stakeholders of the URBACT Local Support Group allowed for application of methods of integrated city development and of participatory activity planning. Particular focus in the approach to urban policies was given to ensuring implementation of the strategic vision of the city determined in the “Integrated Development Strategy for the City of Suceava 2016-2023” and in the “Integrated Development Strategy for the Urban Area of Suceava City 2021-2030” and to reaching the aims of the EU Strategy.



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I. Introduction

1.1 Back in time- Short history of Suceava

The territory of Suceava city and its surroundings were inhabited, as evidenced by archaeological research from the Palaeolithic period. The locality is documented on February 10, 1338, by an act issued by ruler Peter Musat the first. Acquiring the function of capital of Moldova at the end of the fourteenth century, the construction of fortified points, the Suceava Fortress and the Western Fortress directly supported the trade and crafts activities.



Suceava was an important commercial hub where old roads intersected: "Siret road", "Suceava road" or "Upper road" that connected with the Transylvanian cities Rodna and Bistrita and "the big road of Suceava". In the 15th-16th centuries, Suceava was a "big city with 14,000 houses", with a prosperous situation ["Descriptio Moldavae" -Dimitrie Cantemir].

During the years 1774 - 1918 the city of Suceava was part of the Bukovina region being under the domination of the Austrian Empire. In 1786, due to the fact that it was known as a well-developed political, craft and administrative center, Suceava is elevated to the rank of "commercial city with own administration by the municipality" ["Suceava County Monograph" - G.Ostofi, V.Gabor].

With the year 1918, Suceava becomes part of Romania and begins to develop slowly from an economic point of view, being more a trading center. After the end of World War II, the city slowly underwent a process of communist urbanization which increased its population about tenfold throughout the decades before the 1989 Romanian Revolution. It became a municipality in 1968.

1.2 Suceava nowadays- local analysis

Located in the Bukovina region in the northeast of Romania, 450 km from the capital Bucharest, Suceava is a city of 128.088 people (1 January 2020), according to the last data provided by the National Institute of Statistics, which represents 0,6% of Romania's population. Suceava municipality is the residence of Suceava County. Suceava County is known as a land of monasteries, considering that the churches with the exterior painting in the area enjoy a worldwide fame, 8 of them being included in the UNESCO World Heritage List.

Since the move to democracy, the city has been keen to attract foreign investment and is undergoing major renovation to improve the quality of life of its citizens, but also to boost its potential for tourism and as a base for new industries. The local industry is based on glass production, wood processing, textiles, mechanical parts and construction materials. The city has its own airport, located 12km east of the centre.



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In terms of tourism, Suceava is a starting point for trips to historical, cultural and natural attractions in the Bukovina region, particularly one of Romania's main cultural treasures—the painted monasteries of Bucovina. Their painted exterior walls are decorated with elaborate 15th and 16th century frescoes featuring portraits of saints and prophets, scenes from the life of Jesus, images of angels and demons, and heaven and hell. Considered masterpieces of Byzantine art, the eight churches represent an exceptional architectural site. With its landscape of forests and hills, the wider Bukovina region is also a tourist destination.

Once the capital of Moldova (from 1388 until 1565), Suceava also has some noteworthy landmarks of its own. Among them are Saint George's Church, a UNESCO World Heritage site, the Bukovina Ethnographic Museum, with its folk costume collection and exhibits of traditional items, Suceava Fortress and Suceava's main tourist site, the remains of the Princely Court. Other sites include the 14th century Mirăuți Church, the Zamca Monastery and the Bukovina Village Museum, dedicated to the region's woodcraft, ethnography, history and folk art.



At the level of Suceava, the structure of employees by economic activity highlights three main activities in terms of local labour force absorption, services, industry and trade. The services are diversified and provide jobs for approx. 41% of employees in Suceava. The industry, dominated by the manufacturing industry, has a share of 35.8 in the total number of employees, and the trade, the third activity offering jobs, provides 21.9% of the paid jobs. In constructions field there are approx. 10% of the total number of employees, and primary activities taken cumulatively (agriculture, forestry, fish farming) do not exceed one percent.

Industry is also being restructured under the impact of lower demand for its products and reducing consumption.

Tourism is considered an economic activity with great potential to generate development. Among the most important resources to support the future development of Suceava, tourism occupies the first, followed by local resources and industry. In the category of local resources, variables were introduced as local human resource, local intelligence, existing monuments, and opportunities to increase employment through job creation. Services, and in particular trade, are still perceived as exploitable and revenue-generating resources, and the attraction of European funds can be an important resource for development.



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In order to improve the quality of life, *the Integrated Strategy for Urban Development of Suceava Municipality 2016-2023, taken forward by the Integrated Development Strategy for the Urban Area of Suceava City 2021-2030* aims to achieve the following key specific objective : **Development of recreational and leisure infrastructure**. The main measures targeted by the objective are related to the creation / modernization of leisure and recreation facilities, but also to the creation and modernization of playgrounds.

The implementation of the objective aims at:

- extending and organizing the landscape of existing green areas;
- increase the attractiveness of green areas;
- upgrading parks by building facilities to attract and give citizens the opportunity to spend their free time;
- setting up / creating new playgrounds for children;
- creation of leisure and recreation areas.

Suceava Municipality has launched a series of actions to reduce greenhouse emissions, such as *Development of Sustainable Urban Mobility Plan of Suceava Municipality (SUMP)*. The SUMP of Suceava City aims at fulfilling the following fundamental objectives:

- Accessibility - the transport and mobility system will facilitate access to destinations where essential activities are carried out for all categories of users;
- Economic efficiency - the transport and mobility system will further support the development of economic activities in the city of Suceava under conditions of sustainable development;
- Safety - the transport and mobility system will aim to reduce the number of road traffic accidents, especially among vulnerable road users;
- **Environment - the transport and mobility system will aim to reduce the negative impact on the environment (emissions of pollutants, greenhouse gases, noise);**
- Quality of life - the transport and mobility system will be geared towards achieving the above-mentioned fundamental objectives, contributing to sustainable urban development and increasing the quality of life in Suceava.

Although the municipality has already initiated measures to reduce greenhouse emissions, measures that have an impact on the mitigation of climate change, it is necessary to establish an action plan that includes activities to pursue the action taken and complement the scope of action.

According to the *Integrated Strategy for Urban Development of Suceava Municipality 2016-2023, the Integrated Development Strategy for the Urban Area of Suceava City 2021-2030* and the Sustainable Urban Mobility Plan, the intention is to create protection curtains on the alignment of the major traffic arteries in order to reduce pollution. Furthermore, air quality in relation to quality of life is a priority for Suceava.



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At the end of April 2022 Suceava Municipality was selected among the 100 cities that will become climate- neutral by 2030. The proposed mission is called ‘100 Climate-neutral Cities by 2030 – by and for the Citizens’, under the *Climate-neutral and smart cities* mission area, financed through Horizon Europe.

II. What is green infrastructure?

2.1 Defining green infrastructure

Because of its multifunctional character **Green Infrastructure (GI)** has been defined in numerous ways. The green infrastructure definition adopted by the European Commission is: *"Green Infrastructure can be broadly defined as a strategically planned network of high quality natural and semi-natural areas with other environmental features, which is designed and managed to deliver a wide range of ecosystem services and protect biodiversity in both rural and urban settings. More specifically GI, being a spatial structure providing benefits from nature to people, aims to enhance nature's ability to deliver multiple valuable ecosystem goods and services, such as clean air or water."* European Union (2013): Building a Green Infrastructure for Europe.



Below you'll find other definitions that are currently being used:

Green Infrastructure...

"...is an interconnected network of natural areas and other open spaces that conserves natural ecosystem values and functions, sustains clean air and water, and provides a wide array of benefits to people and wildlife." Benedict, M. and McMahon. E. (2006): Green infrastructure. Linking Landscapes and Communities.

"...is a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services. It incorporates green spaces (or blue if aquatic ecosystems are concerned) and other physical features in terrestrial (including coastal) and marine areas. On land, GI is present in rural and urban settings."





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German Federal Agency for Nature Conservation (BfN) (2017): Federal Green Infrastructure Concept.

2.2 Benefits of Green infrastructure

The benefits of well-planned and well-managed **Green Infrastructure** are manifold. They go beyond those often associated with natural green spaces such as providing space for wildlife. **Green Infrastructure** also provides the benefits and services that we as human beings require to thrive and maintain a quality of life. It is therefore an important consideration in planning for development and meeting the needs of the population as well as protecting and enhancing biodiversity.

Green infrastructure should be considered as multifunctional, with different types providing different services/benefits dependant on local needs and circumstances. Those needs include making space for and protecting wildlife, providing access to nature, recreation and social interaction, reducing flood risk, improving despoiled landscapes (including those within our settlements) and reducing the negative effects of climate change among many others.

Green infrastructure has been proven to be a sound investment with returns far higher than the initial investment. Research in the United Kingdom has evaluated the benefits in terms of monetary value for example a proven reduction in costs to health services where **Green Infrastructure** is accessible and promoted. The most important aspect of a **Green Infrastructure** approach is promoting and demonstrating the benefits of it. This multifunctional understanding of **Green Infrastructure** is what makes it relevant to everybody and at levels of society.

Green infrastructure planning is a successfully tested tool to provide **environmental, economic and social benefits through natural solutions**. In many cases, it can reduce dependence on 'grey' infrastructure that can be damaging to the environment and biodiversity, and often more expensive to build and maintain.



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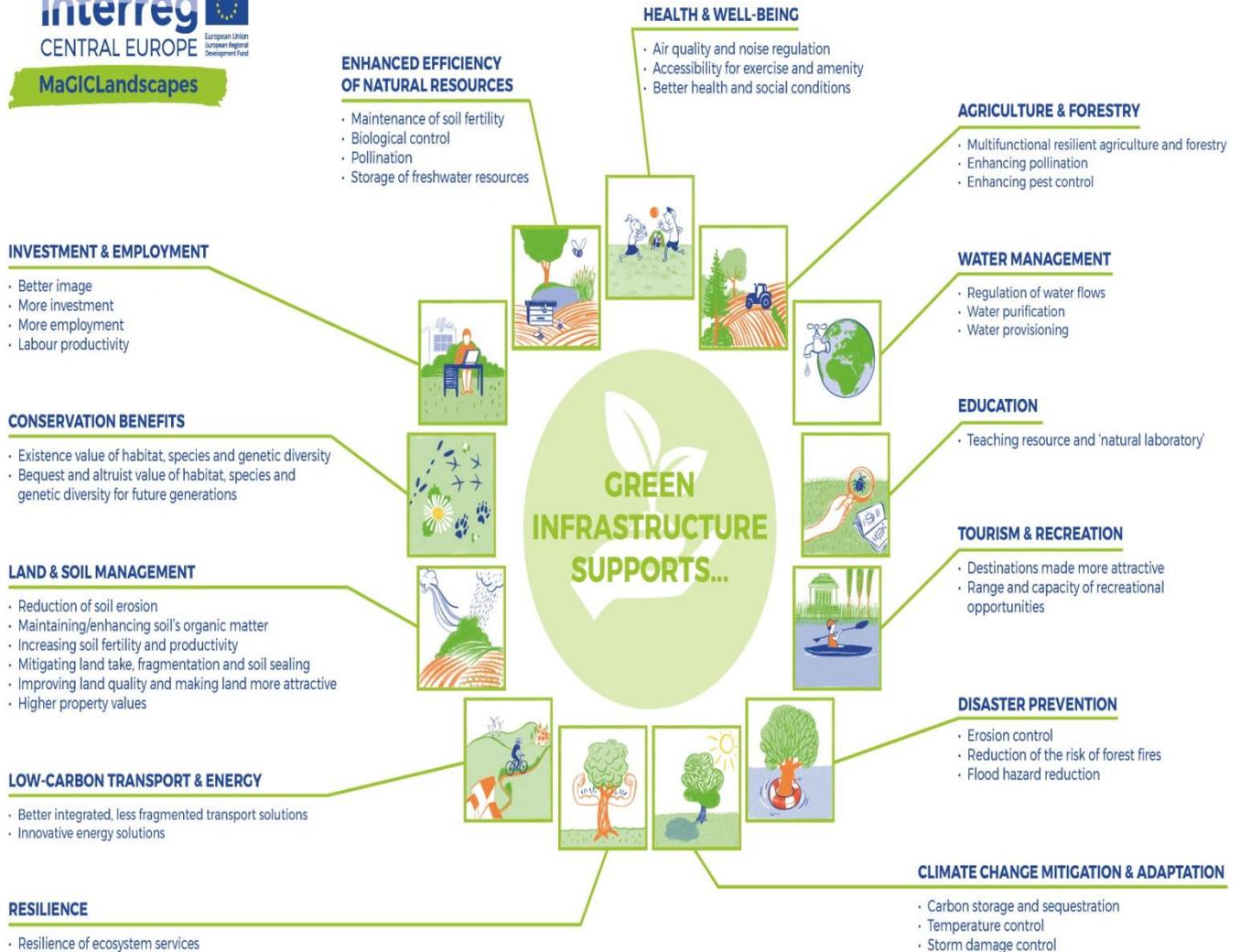
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MaGICLandscapes



Adapted from: Communication of the European Commission - Technical Information on Green Infrastructure (2015) | Icons: Anja Maria Eisen



Leibniz Institute of Ecological Urban and Regional Development





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2.3 What does a Green Infrastructure consist of?

Green Infrastructure is made up of a wide range of different environmental features which can operate at different scales, from small linear features such as hedgerows or fish ladders or green roofs to entire functional ecosystems, such as intact floodplain forests, peatlands or free-flowing rivers. Each one of these elements can contribute to GI in urban, peri-urban and rural areas, inside and outside protected areas.

Examples of green infrastructure



Rain garden



Green roof



Permeable pavement



Infiltration trench



Landscape water body



Grassed swale

It is important however to be aware that not all green spaces or environmental features necessarily qualify to be part of GI. In addition to being of high quality they must also form an integral part of an interconnected GI network and be capable of delivering more than simply ‘a green space’. An urban park inside a city, for instance, might well be considered an integral part of Green Infrastructure if it acts as a cool air corridor, absorbs excess water run-off and offers an attractive outdoor area for recreation and wildlife. On the other hand, a patch of uniform grass that contains no other environmental features is unlikely to qualify as GI.

In rural areas, intensively managed farmland would also not normally form part of a GI network unless it were specifically managed in a way that supports local biodiversity or that encourages a more multifunctional land use which combines food production with other benefits, like recreation or water purification.



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2.3.1 Green Infrastructure in detail

Green infrastructure elements can be woven into a community at several scales. Examples at the urban scale could include a rain barrel up against a house, a row of trees along a major city street, or greening an alleyway. Neighborhood scale green infrastructure could include acres of open park space outside a city center, planting rain gardens or constructing a wetland near a residential housing complex. At the landscape or watershed scale, examples could include protecting large open natural spaces, riparian areas, wetlands or greening steep hillsides. When green infrastructure systems are installed throughout a community, city or across a regional watershed, they can provide cleaner air and water as well as significant value for the community with flood protection, diverse habitat, and beautiful green spaces.

1. Downspout Disconnection

This simple practice reroutes rooftop drainage pipes from draining rainwater into the storm sewer to draining it into rain barrels, cisterns, or permeable areas. You can use it to store stormwater and/or allow stormwater to infiltrate into the soil. Downspout disconnection could be especially beneficial to cities with combined sewer systems.



Water from the roof flows from this disconnected downspout into the ground through a filter of pebbles.

2. Rainwater Harvesting

Rainwater harvesting pollution by slowing runoff later use. The variety of backyard rain barrel and cistern to ground level pits, capture dew and fog. These implemented world-wide.



This rainwater harvesting system is adapted to the architecture of the building and its surroundings.

systems reduce stormwater and collecting rainfall for systems range from the the commercial building aquifers and even nets that types of systems have been



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3. Rain Gardens



A rain garden can be beautiful as well as functional.

Rain gardens are small, shallow, sunken areas of plantings that collect stormwater runoff from roofs, streets, and sidewalks. Also known as bioretention cells, they are designed to mimic the natural ways water flows over and absorbs into land to reduce stormwater pollution.

4. Planter Boxes

Planter boxes are urban rain gardens with vertical walls and either open or closed bottoms. Usually found in downtown areas, they collect and absorb runoff from streets, sidewalks and parking lots. Ideal for areas with limited space, planter boxes can be a useful way to beautify city streets.



Planter boxes are an attractive tool for filtering stormwater as well as reducing the runoff that goes into a sewer system.

5. Bioswales



Bioswales are essentially rain gardens placed in long narrow spaces such as the space between the sidewalk and the curb.

Bioswales, often found along curbs and in parking lots, use vegetation or mulch to slow and filter stormwater flows.



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6. Permeable Pavements



Permeable pavement is a good example of a practice that catches water where it falls.

Permeable pavements infiltrate, treat, and/or store rainwater where it falls. They can be made of pervious concrete, porous asphalt, or permeable interlocking pavers. This practice could be particularly cost effective where land values are high and flooding or icing is a problem.

7. Green Streets and Alleys

Green streets and alleys are created by integrating green infrastructure elements into their design to store and filter stormwater. Permeable pavement, bioswales, planter boxes, and trees are among the elements that can be woven into street or alley design.



Green streets combine more than one feature to capture and treat stormwater.

8. Green Parking

Many green infrastructure elements can be seamlessly integrated into parking lot designs. Permeable pavements can be installed in sections of a lot and rain gardens and bioswales can be included in medians and perimeter. When built into parking lots, these elements also reduce the heat island effect and improve walkability



Parking lots are a good place to install green infrastructure that can capture stormwater that would usually flow into the sewer system.

elements can be installed in sections of a parking lot, these bioswales can be along the parking lot perimeter. When built into parking lots, these elements also reduce the heat island effect in the area.



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9. Green Roofs

Green roofs are covered with growing media and vegetation that enable rainfall infiltration and evapotranspiration of stored water. They are particularly cost-effective in dense urban areas where land values are high and on large industrial or office buildings where stormwater management costs are likely to be high.



A green roof system atop a building helps manage stormwater and reduce energy costs for cooling.

10. Urban Tree Canopy

Trees absorb stormwater branches. Many cities to restore the benefits of were businesses, and participate in planting throughout the urban



City trees, or tree canopy, soak up stormwater, provide cooling shade and help to slow traffic.

in their leaves and have set tree canopy goals trees lost when the areas developed. Homeowners, community groups can and maintaining trees environment.

11. Land Conservation

The water quality and flooding impacts of urban stormwater also can be addressed by protecting open spaces and sensitive natural areas within and adjacent to a city while providing recreational opportunities for city residents. Natural areas that should be a focus of this effort include riparian areas, wetlands, and steep hillsides.



Land conservation is another good tool for communities to use for reducing the risks of stormwater runoff and sewer overflows.



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III. Green Infrastructure & Health

3.1 Health

Health, according to the World Health Organization, is "a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity." A variety of definitions have been used for different purposes over time. Health can be promoted by encouraging healthful activities, such as regular physical exercise, and by reducing or avoiding unhealthful activities or situations, such as smoking or excessive stress. Some factors affecting health are due to individual choices, such as whether to engage in a high-risk behaviour, and others are due to structural causes, such as whether the society is arranged in a way that makes it easier or harder for people to get necessary healthcare services. Still other factors are beyond both individual and group choices, such as genetic disorders.



The meaning of health has evolved over time. In keeping with the biomedical perspective, early definitions of health focused on the theme of the body's ability to function; health was seen as a state of normal function that could be disrupted from time to time by disease.

Generally, the context in which an individual lives is of great importance for both his health status and quality of life. It is increasingly recognized that health is maintained and improved not only through the advancement and application of health science, but also through the efforts and intelligent lifestyle choices of the individual and society. According to the World Health Organization, the main determinants of health include the social and economic environment, the physical environment and the person's individual characteristics and behaviours



More specifically, key factors that have been found to influence whether people are healthy or unhealthy include the following:

- Income and social status
- Social support networks
- Education and literacy
- Employment/working conditions
- Social environments
- Physical environments
- Personal health practices and coping skills
- Healthy child development
- Biology and genetics
- Health care services
- Gender
- Culture

The maintenance and promotion of health is achieved through different combination of physical, mental, and social well-being, together sometimes referred to as the *"health"*



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triangle." The WHO's 1986 *Ottawa Charter for Health Promotion* further stated that health is not just a state, but also "a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities."

The environment is often cited as an important factor influencing the health status of individuals. This includes characteristics of the natural environment, the built environment and the social environment. Factors such as clean water and air, adequate housing, and safe communities and roads all have been found to contribute to good health, especially to the health of infants and children. Some studies have shown that a lack of neighbourhood recreational spaces including natural environment leads to lower levels of personal satisfaction and higher levels of obesity, linked to lower overall health and well-being. It has been demonstrated that increased time spent in natural environments is associated with improved self-reported health, suggesting that the positive health benefits of natural space in urban neighbourhoods should be taken into account in public policy and land use.

Role of public health

Public health has been described as "the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals."(Winslow CE (1920). "The Untilled Fields of Public Health") It is concerned with threats to the overall health of a community based on population health analysis. The population in question can be as small as a handful of people or as large as all the inhabitants of several continents (for instance, in the case of a pandemic). Public health has many sub-fields, but typically includes the interdisciplinary categories of epidemiology, biostatistics and health services. Environmental health, community health, behavioural health, and occupational health are also important areas of public health.

The focus of public health interventions is to prevent and manage diseases, injuries and other health conditions through surveillance of cases and the promotion of healthy behaviour, communities, and (in aspects relevant to human health) environments. Its aim is to prevent health problems from happening or re-occurring by implementing educational programs, developing policies, administering services and conducting research. In many cases, treating a disease or controlling a pathogen can be vital to preventing it in others, such as during an outbreak.

3.2 The impact of Green Infrastructure on human health and well-being

By weaving natural features into the built environment, green infrastructure can not only provide stormwater management, but also a number of other environmental, social, and economic benefits not typically provided by gray infrastructure. Green infrastructure increases exposure to the natural environment, reduces exposure to harmful substances and conditions, provides opportunity for recreation and physical activity, improves safety, promotes community identity and a sense of well-being, and provides economic benefits at both the community and household level. These benefits are all known to directly or



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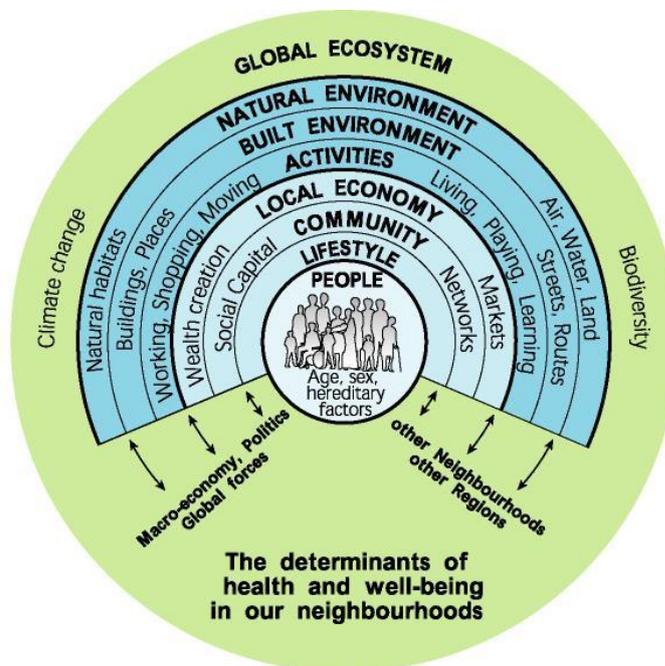


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indirectly benefit public health. The degree to which the environmental, social, economic, and public health benefits of green infrastructure are realized is dependent on a number of factors, including the design, installation, and maintenance of the green infrastructure features.

Why is green infrastructure important for health?

Throughout history, people have enjoyed spending time in gardens, parks and green spaces. There is now wide-ranging and robust evidence that green spaces have measurably positive effects on people’s health. This is not just about taking exercise in green spaces, although that is, of course, beneficial; even being able to see trees through a window offers benefits to both mental and physical health. Investing in what is now known as green infrastructure is a cost-effective way of investing in public health.



The ‘wider determinants of health’ – sometimes called the ‘social determinants of health’ (see the diagram produced by Hugh Barton and Marcus Grant above) – are the many factors that influence whether or not people live healthy lives. Some of them, such as our genes, our age and our gender, are things over which we have no influence. Others, such as our homes and neighborhoods, our social networks, and the natural environment and climate, are things that are shaped by the societies in which we live.

The planning system has an influence over many of the wider determinants of health, including people’s lifestyles, their local communities, the activities available to them, the local economy, the built environment, the natural environment, and the mitigation of and adaptation to the effects of climate change.



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The role of green infrastructure in health promotion

There is a lot of robust evidence that green infrastructure can help to improve people's health and wellbeing in many different ways. Investing in green infrastructure is cost effective because green infrastructure can deliver many benefits at once. It is also effective in reducing health inequalities. This factsheet outlines some of the ways that green infrastructure can benefit health.

Improving mental health



There is wide-ranging international evidence that spending time in green spaces is good for a range of mental health conditions. It has been shown that people living in greener urban areas tend to be happier than people in areas with less urban greenery. General health questionnaire scores have shown that people living in greener areas experience significantly lower levels of mental distress, while life satisfaction scores have indicated significantly higher levels of wellbeing among people living in greener areas.

The mental health and wellbeing benefits of green space can also result from participation in activities occurring in such spaces, such as social interaction or physical exercise. Benefits include alleviation of stress and anxiety, and improved mood and attention span.

A green urban environment that supports health in general may also produce healthier workforces, enhancing people's productivity and earning potential as well as their quality of life. Reductions in productivity due to obesity and depression are major cost factors affecting businesses. Improving access to green space can enhance mental and physical health and produce major economic benefits through reduced absenteeism. Engaging with nature benefits those living with conditions such as attention deficit hyperactivity disorder, depression and dementia, by improving cognitive functioning and reducing anxiety.

Evidence indicates that participation in physical activity in a natural setting is associated with more improved mental health outcomes than is the case for participation in physical activity in an indoor setting.



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Encouraging physical activity and improving physical health

The health benefits of physical activity are potentially huge. If there were medication that had a similar effect, it would be regarded as a ‘wonder drug’ or ‘miracle cure’. In the UK, illness as an outcome of physical inactivity has been calculated as costing the National Health Service alone between £0.9 billion and 1 billion per year. Indirect costs have been estimated at £8.2 billion per annum. There are strong links between the availability of green space and greater levels of physical activity and its associated health benefits. A study carried out across Europe found that people living in areas with large amounts of green space were three times as likely to be physically active as people living in areas where there is little green space. There is evidence that improvements to air quality, prioritization of neighborhood tree planting and the provision of open and green spaces are all associated with increases in physical activity and improved general physical health outcomes. It has been convincingly argued that planting trees is the best thing we can do for public health.

Encouraging social cohesion and a sense of belonging

Social cohesion is vital for a sustainable community. Open space provides a platform for community activities, social interaction, physical activity and recreation, thus helping to reduce social isolation, to improve community cohesion and positively affect the wider determinants of health.

A study carried out in the Netherlands found an association between the quantity and – even more strongly – the quality of streetscape greenery and perceived neighbourhood-scale social cohesion, defined in the study as a sense of community, with a focus on trust, shared norms and values, positive and friendly relationships, and feelings of being accepted and belonging.

Benefiting the health of children and older people

Green infrastructure can have a positive impact on the wellbeing of children and young people. High levels of greenery at home and at school have been associated with improved cognitive development in schoolchildren (better progress in working memory and reduced inattentiveness). Evidence also suggests that improving the appearance of parks can increase physical activity among children, as well as among adults.

According to research in Switzerland, public urban green spaces play an important role in children’s and young people’s social networks, including friendships across cultures, thus helping to promote social inclusion.





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Green infrastructure can have a positive impact on the wellbeing of elderly people. Many older people find it very difficult to maintain even moderate levels of physical activity, so providing green spaces that encourage older people to be active, even if only at a light level, is important for public health. A positive relationship between the amount of green space and self-reported health in senior adults has been

demonstrated in the Netherlands. An assessment of the role of green spaces in helping to tackle sleep deficiency found a stronger beneficial effect for people aged 65 and older compared with younger adults.

Reducing air and noise pollution

Evidence shows that air pollution in European cities is currently responsible for a significant numbers of deaths and hospital admissions and for exacerbating the symptoms of poor health. Green infrastructure can help to improve air quality and reduce health risks from air pollution. However, to be fully effective it needs to be combined with other changes to land uses at broader spatial scales.

Natural capital is one of the key determinants of health, and air quality is one area where great gains can be made. Trees and other vegetation can remove pollutants from the air and reduce atmospheric carbon dioxide through carbon storage and sequestration.



Noise pollution is a major and increasing threat to human health in urban areas, due to industrial activity, rising traffic volumes, and the decreasing availability of quiet places. Evidence suggests that well-designed urban green space can buffer the noise (or the negative perception of noise) emanating from non-natural sources such as traffic and can provide relief from city noise.

Reducing health inequalities

Provision and maintenance of appropriate green space in urban areas can make an important contribution to reducing health inequalities. There is growing evidence showing that the benefits of urban green space may be greater for the lowest socio-economic groups, including minority ethnic groups.

One UK study found that the quality of, access to and use of urban green space was a significant predictor of overall health for African Caribbean, Bangladeshi, Pakistani and other minority ethnic groups– who were also those with the poorest general health.



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Mitigating the urban heat island effect

The urban heat island effect can pose a serious health hazard during heat waves and extreme heat events. It arises as a result of the replacement of vegetation with impervious heat-absorbing surfaces in urban areas. Urban greenery such as parks, street trees and green roofs mitigate the urban heat island effect. During warmer weather, trees can offer shade and reduce the demand for air conditioning, and – especially in warmer countries – they can provide comfortable outdoor settings and allow people to avoid heat stress.





IV. Green infrastructure in Suceava Municipality

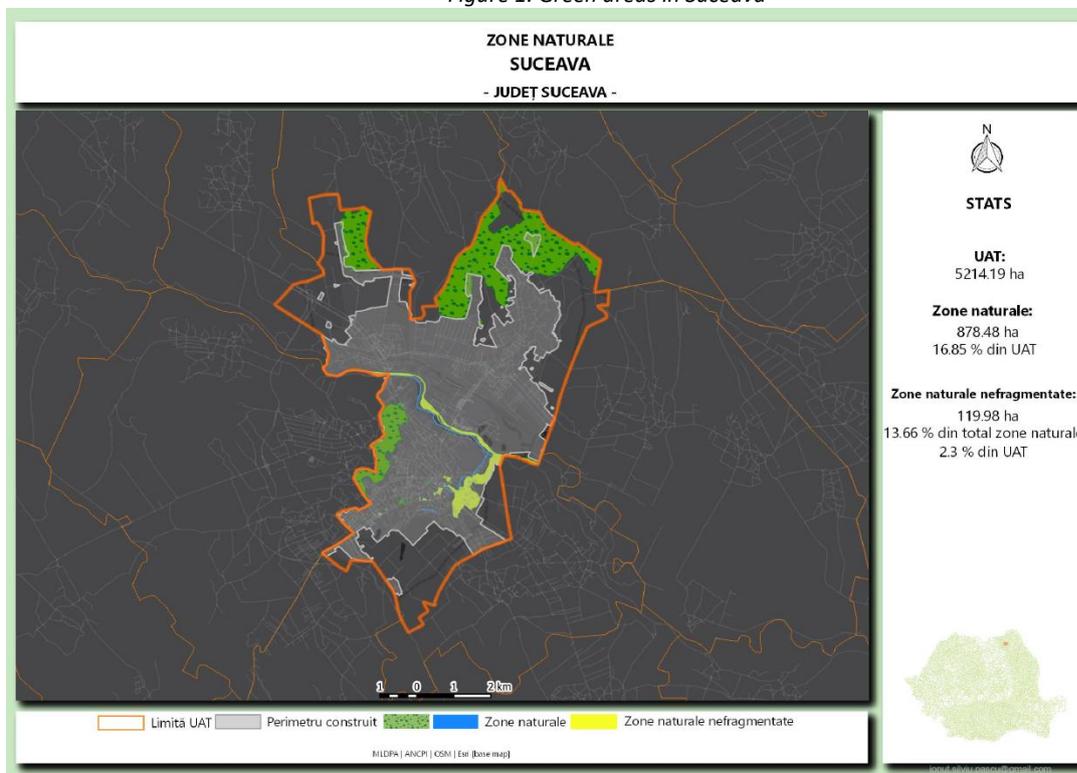
4.1 Urban green spaces

The surface of green spaces, as well as facilitating access to them, is one of the safest ways to increase the quality of life in a city. The development, rehabilitation and maintenance of urban green infrastructure should be an absolute priority for every town hall in the country. However, the green infrastructure is poorly developed in Romania. Of the county residences in Romania, only 5 have more than 26 sqm of green spaces per capita - European Commission standard for urban spaces, and Suceava has 20 sqm of green spaces per capita.

Urban parks are also of particular importance, due to the larger areas, the complex facilities they have and the degree of ecological and social multifunctionality. An urban park can offer the population various cultural services, such as recreational services, sports activities, socializing or experience in nature. The surface of the existing urban parks in Suceava is 21.31 ha, and the square meters of urban park space per capita is 1.85 sqm / capita.

Also, an important indicator is the surface of urban green spaces, such as parks, public gardens or public squares, cemeteries, land bases and sports facilities within the buildable perimeters of localities. These green spaces are a balancing element for urban gray infrastructure.

Figure 1. Green areas in Suceava



Source: Romania's Urban Policy



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According to the Sustainable Energy Action Plan of Suceava Municipality and the information provided by the Technical Directorate for Public Services Coordination - Environmental Protection Office, the surface of green spaces in Suceava Municipality is 2,373,884 sqm, of which:

- Parks: 686,030 sqm
- Squares: 326,475 sqm
- Alignment: 241,379 sqm
- Land (including landslides): 1,120,000 sqm

The largest parks in Suceava are Șipote and Zamca Park, but there are also various green spaces with a decorative role or green spaces with limited access, such as the green space at the Royal Inn, the Monastery of St. John the New, or the church of St. Dumitru - The Royal Court.

Table 1. Inventory of goods belonging to the public domain of Suceava

| Name | Surface | Year of acquisition / commissioning |
|--|-------------|-------------------------------------|
| Central Park | 16.000 sqm | 1912 |
| Prefecture Park | 4.668 sqm | 1978 |
| University Park | 18.400 sqm | 1915 |
| Curtea Domnească Park | 15.000 sqm | 1992 |
| City Hall Park | 13.300 sqm | 1052 |
| Șipote- Cetate dendrological Park | 102.000 sqm | 1976 |
| 22 Decembrie Square Park | 27.000 sqm | 1970 |
| 1 Mai Ițcani Park | 9.100 sqm | 1910 |
| Simion Florea Marian Park | 4.300 sqm | 1962 |
| Park in front of the Polyclinic | 2.400 sqm | 1961 |
| Burdujeni Cinema Park | 1.200 sqm | 1992 |
| Cathedral Park | 3.600 sqm | 1991 |
| Park at the ice-skating rink | 7.600 sqm | 1986 |
| Areni Park | 1.265 sqm | 1965 |
| Nordic Park | 1.250 sqm | 1982 |
| Bucovina Park | 1.200 sqm | 1976 |
| PTTR Park | 1.200 sqm | 1983 |
| Arts High School Park | 1.200 sqm | 1992 |
| Park at the intersection between Scurtă Street and 1 Mai Blvd. | 1.200 sqm | 1972 |

Source: Sustainable Energy Action Plan for Suceava City

4.2 Mapping the city

According to the General Urban Plan, the green spaces within Suceava municipality include green spaces with unlimited public access, green spaces with limited access, green spaces for collective dwellings and green alignment vegetation.

The most important green spaces with unlimited public access are:

The Dendrological Park Șipote-Cetate - is the most significant green area of the city benefiting from significant terrain variations, large natural grassed areas, wooded areas with tree varieties.

It is situated in the south-eastern part of Suceava, in the immediate vicinity of Suceava Fortress. Although the Park is located on the administrative territory of Suceava municipality, it was not in the property of the Municipality until September 2020.



Through the Government Decision from September 2020, the Dendrological Park Șipote-Cetate was transferred from the property of Suceava Forest Directorate to the Municipality of Suceava.

This is an important victory for the Municipality, since the park is in a poor condition, the quality of the urban furniture (almost non-existent) is very low, some of these objects having accessibility and utility problems, and now there is legal basis for investments and rehabilitation process of the most important green area of the city.

The intention of the Municipality is to render the park's functionality to the citizens. Therefore, a project is now being prepared and a public debate will also be organized. The project envisages the rehabilitation of the Șipote Park, respectively the rehabilitation of the



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pedestrian infrastructure, the creation of tourist markings, tourist information panels, the creation / modernization of the urban lighting system, the arrangement of leisure areas.



Another important green space in Suceava city is **Tatarasi Recreational area** which is situated close to the city centre and has an area of approximately 75.000 sqm. This was inaugurated in 2018 and since then the citizens of Suceava city have a beautiful place in the heart of the city for spending free time with their friends and family. Tatarasi recreational area has sports fields, playgrounds and a lake where people can practice water sports.



Central Park - in the heart of the city, has an area of approximately 16.000 sqm. It represents the green area of the city with abundance of urban furniture, which makes it the busiest park during the weekend;

Finances Park - Prefecture (Flag Square) - is located near the Central Park, on both sides of Stefan cel Mare street. The total area is approx. 4.668 sqm. This park, along with the Central one, is notable for the high frequency of visitors, especially in the days that allow for outdoor walks, being present visitors from all age categories.



University Park - has an area of about 18.400 sqm. It is one of the busiest parks in the city considering its location in the vicinity of the "Stefan cel Mare" University. It is also the park most frequented by children and parents because it has a play area and an outdoor sports area.



Tribunal Park - is intended primarily for short-term rest or for recreation of children, pensioners or other categories. The attractiveness and reception capacity of the park can be increased by redeveloping areas of this park.

Vladimir Florea Park (Park in front of the Polyclinic) - it is practically placed between four lanes of traffic, reduced in size, it is crossed daily by a large public. It is mainly a crossing staircase, but in the hours after noon and on weekends or holidays it is used for rest and recreation for children, pensioners or other categories, despite the fact that heavy traffic in the area does not favor this working;

"Simeon Florea Marian" Park - is located near the memorial house of Simeon Florea Marian. It falls into the category of parks intended for recreation and short-term rest, being frequented by many inhabitants of the area, with a service radius of approx. 400 m. The park has been renovated recently to the delight of the citizens.

Station Suceava Nord / Itcani Park - these are located in the Itcani district and it was modernized in 2013 through the project "Rehabilitation of streets, bridges and passage, modernization of parks and creation of modular public transport stations in Suceava".

Burdujeni Cinema Park - this is located in the Burdujeni district and was modernized in 2013 through the project "Rehabilitation of streets, bridges and passage, modernization of parks and creation of modular public transport stations in Suceava."

Recreational area on Suceava river banks- the newest investment completed in the autumn of 2021 by Suceava municipality funded from European funds. Through this project, on an area of 15 hectares, the following arrangements and endowments were made: green spaces,



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pedestrian alleys, cycling tracks, lighting system, irrigation systems, Wi-Fi, urban furniture, 1 tennis court, 2 badminton / volleyball courts, fitness / yoga platform, cultural events platform.



In agreement with the presented ones, it is observed that Suceava Municipality has small parks. According to the updated GUP, in Suceava municipality there is no park or public garden, in the true sense of the notions, all the green spaces being mainly classified in the category of squares. Any city of county residence with a large population must have a park, with appreciable surface area, divided into distinct sectors for different types of recreational activities (passive and active leisure sectors, children's play and recreation sector, exhibition sector, etc.).

Besides these parks, in the city of Suceava can be found numerous green spaces with decorative role as well as green spaces with limited access, arranged either in private areas or in the area of public institutions.

In residential areas, green areas are represented by living fences and grassy areas. The lack of spaces for car parking has determined that some of these spaces will be occupied (arranged or not) by cars. Also, the green areas in the residential neighbourhoods have gradually reduced their area due to the construction of kiosks, garages or ground floor extensions.



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The register of green space records also presents the non-productive free lands, respectively:

- The slope of NV Zamca (free land affected by landslides) with a total area of 1,120,000 square meters;
- NE slope with a total area of 140,000 square meters;
- Teodoreni Hill with a total area of 450,765 sqm.

From the analysis of the current situation but also from other strategic documents made at the level of the municipality, the following conclusions regarding the public spaces are drawn:

- the quality of public spaces is relatively low due to the lack of investments, facilities and maintenance;
- although the share of green spaces is above the limit imposed at European level, their condition is precarious, many of them even becoming unused;
- to ensure adequate access for tourists and residents to the Fortress and to increase its tourist potential, it is necessary for the Şipote Park to be set up and the alleys, public lighting, rest and recreation areas to be set up;



- Suceava municipality does not have a park or a public garden, in the true sense of the notions, all the green spaces being classified as squares. Any city resident in a county with a large population must have a park, with appreciable surface area, divided into distinct sectors for different types of recreational activities;
- Green spaces are treated individually, without coherence and a system of green connections between them;
- The quality of the urban furniture is generally satisfactory, but the lack of unity is noticeable. The variety of shapes, materials and colours creates a sense of disorder and improvisation. Also, there are areas with abundance of urban furniture and whole areas where they are missing or improperly disposed;
- Many of the existing playgrounds are not properly equipped, and some residential areas do not have these facilities.



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V. Urbact Local Group

The Mayor's decision no. 961/14.01.2020 establishing the composition of the Local Support Group of Suceava Municipality to achieve the project "Health& Greenspace- Health-responsive planning and management of urban green infrastructure" approves the establishment of the Urban Local Group (ULG) of Suceava. As a result, all parties signed the Association Agreement on participation in Suceava Urban Local Group for the project "Health& Greenspace - Health-responsive planning and management of urban green infrastructure", funded by the Interregional Cooperation Programme URBACT III registered with no. 5584/25.06.2019.

Thus, Suceava ULG is composed of different institutions and organizations, represented by qualified and experienced staff in all areas related to the project's main areas of intervention, who have conscientiously responded to all calls to local and transnational meetings, roundtables and seminars organized by Suceava Municipality. They have experience and expertise in areas such as education, health, social assistance, environmental protection authorities and NGOs for environmental protection, apartment owners association, local media and the City Council of Suceava.

It is well known that public participation and citizen involvement in developing a common understanding of the objectives, problems and possible strategies providing solutions to problems can improve the quality of decision planning, its implementation and evaluation throughout the entire duration, increase its efficiency in financial terms, effectiveness, transparency, acceptability and public support, but also its legitimacy.

Benefits: it improves the quality of decisions, certain issues and challenges are identified in the planning phase and consultation in the planning phase leads to agreeing controversial issues and preventing the opposition in the decision making process; it can also prevent delays and reduce costs during implementation, increase acceptability of measures, the decisions making process becomes more democratic, putting in the hands of local communities the power to influence decisions; as a consequence, they become responsible, consultations determine the capacity to plan locally, increase public confidence in their decision-making ability, learn and exchange of experience.

The URBACT Health&Greenspace Local Group is composed of:

1. Consiliul Local al Municipiului Suceava (City Council of Suceava).
2. Spitalul Județean de Urgență "Sfântul Ioan cel Nou" Suceava ("Sfântul Ioan cel Nou" County Emergency Hospital Suceava)
3. Direcția de Sănătate Publică Județeană Suceava (Public Health Directorate of Suceava County)
4. Agenția pentru Protecția Mediului Suceava (Environmental Protection Agency of Suceava)



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5. Colegiul Tehnic “Petru Mușat” Suceava (“Petru Mușat” Technical High School of Suceava)
6. Colegiul Economic “Dimitrie Cantemir” Suceava (“Dimitrie Cantemir” Economical High School of Suceava)
7. SC Intermedia SRL(Local Media)
8. Asociația de Proprietari nr. 50 Suceava (Apartment Owner`s Association no 50 Suceava)
9. Asociația Grupul Ecologic de Cooperare – GEC Bucovina Suceava (Ecological Cooperation Group Bucovina Association, Suceava)
10. Direcția de Asistență Socială, Municipiul Suceava (Social Assistance Directorate, Suceava Municipality)
11. Birou Protecția Mediului, Municipiul Suceava (Environmental Protection Office, Suceava City Hall)
12. Direcția Generală a Domeniului Public, Municipiul Suceava (General Directorate of Public Domain)
13. Facultatea de Silvicultură, Universitatea Ștefan cel Mare Suceava (Faculty of Forestry, “Ștefan cel Mare” University of Suceava)

Consultations, discussions and information gathering, as well as exchange of experience took place in round tables, seminars and workshops organized periodically depending on the progress of project activities, according to the following schedule:

1. February 25th, 2021, a common event for launching and getting to know the project by the designated members of Suceava ULG,
2. April 23th, 2021, a working meeting where the ULG members worked on a preliminary SWOT analysis- Environment and Health in Suceava and the Small Scale Action was defined and discussed.



3. August 31th, 2021, a round table where the SWOT analysis was delivered in the final form. The objectives and the results were discussed, together with first stage of planning the actions to be included in the Integrated Action Plan of Suceava city.
4. September 24th, 2021- working meeting with members of the core ULG. Brainstorming for adding more actions to the IAP.
5. November 24th, 2021- working meeting with members of the core ULG. Meeting was focused on the first draft of the IAP of Suceava municipality – presentation, lessons learned from the transnational meeting from Messina, Italy, recommendations acquired from the online workshop hosted by Suceava city on 17.11.2021 and a presentation of the SSA completed by



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details about implementation. ULG members provided suggestions and recommendations for improving the IAP and for replicating the SSA.

6. April 14th, 2022- Members of the core ULG had their 6th meeting. It was a meeting with many topics approached. Among these it was the analysis of the second draft of the IAP, lessons learned from the transnational meeting which took place in Tartu, Estonia, at the end of March, suggestions for finding financial sources to implement the actions from the IAP, and last but not least planning the URBACT City Exchange visit which will be held online with the partners from Tartu. The meeting ended with a discussion about next steps in the project.
7. June 24th, 2022- ULG members had their final meeting. The objectives and the results of the project were discussed together with the final version of the IAP. Another part of the meeting it was about lessons learned from the transnational final meeting which took place in Limerick, Ireland and from URBACT City Festival that took place in Paris, France.





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VI. **Elaboration of the Integrated Action Plan**

6.1 Stages of planning and methodology

1. Review the baseline situation, Analysis (establishing personal interests, how they are affected, capacity and motivation) and involvement (possible actions to attract their participation) of stakeholders and key participants
2. Problem Analysis
 - identify the major problems and find possible solutions to the problem;
3. Moving from solutions to objectives proposed, selection and prioritization of objectives to be covered by future planning: Setting Targets (an observable and measurable result suggested on an indefinite period of time / Objectives (target defined more specifically and for a clearer period of time / Results (clear, measurable, necessary to establish the achievement of objectives) / Activities (in what way the expected results can be achieved)
4. Action Planning
 - Fill in a table comprising: possible activities and description, Actor and Key-partner to be involved in developing the activity, Expected results and Indicators to measure achievements, Implementation period, Necessary financial and human resources. Development of the way activities are implemented.
5. Make a draft format of an Integrated Action Plan
6. Consultation and approval from Suceava ULG
7. Integrated Action Plan review
8. Signing
9. Establishing a strategy to communicate the Integrated Action Plan and Public Launch.

6.2 Target group

The definition of the target group was required as an orientation guide for setting strategic objectives and activities planning, since they are actually the main beneficiaries of current planning measures and results. Therefore, the target group consists of citizens of all ages that can be residents of Suceava city, students or tourist visiting the area, with children, elderly and people with poor health condition as a priority target group.



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6.3 SWOT ANALYSIS – Environment and health in Suceava

| STRENGTHS | WEAKNESSES |
|--|---|
| <ul style="list-style-type: none"> • The existence of two forests (Sipote and Zamca) in the immediate vicinity of the city • Involvement of specialists • Beneficial and efficient ideas • The institutions are open and willing to help the financiers (support for completing the financing applications) • The richness of green areas • Green spaces around apartment buildings • Willingness of authorities to solve the green spaces problem and to implement projects in this field • Availability, young generation, ideas, European projects • Arrangement of above-ground car parks • Metropolitan electric transport | <ul style="list-style-type: none"> • Lack of street alignment along many arteries and residential neighbourhoods with very close apartment buildings • Existence of hyper/super market inside the city • Reduced pedestrian distance (space for pedestrians) • Reluctance of owners` association at some proposals • Involving young people and educating them in the spirit of respecting the green space and the activities that provide us with life • Requests from the inhabitants for parking arrangements • High density of buildings in Suceava • Cutting the trees around the blocks at the request of the owners' associations • Expansion of construction • High demand for parking places • Requests for tree cutting near apartment buildings • The city of Suceava has covered only the minimum of green space / inhabitant • Lack of communication, non-involvement • Unequal access to green spaces • The way the green spaces are distributed and the way the street alignments are managed |
| OPPORTUNITIES | THREATS |
| <ul style="list-style-type: none"> • Degradated lands in the immediate vicinity of the city than can be afforested (within the green belt of the city) • Availability for the involvement of specialists in the proposed activities • Development of green areas as creative spaces and for improving the quality of life • Improving air quality by developing green projects and keeping alive existing trees • The existence of parks that have a great potential for arranging relaxation and play areas for children • Arranging recreational places in existing parks • Existence of financing resources for landscaping/ extension of green spaces • Forming a team that will improve the image of the city • History of parks (Sipote and Zamca)- dendrological parks • Arrangement of House of Culture area with green spaces | <ul style="list-style-type: none"> • Agglomeration of new constructions in the city(increasing the urban density of built space) • Reluctance of some citizens to the proposals of specialists • Insufficiency of investment funds • The disappearance of green spaces through the development of constructions • Air pollution • Noise pollution • Pollution of the groundwater due to massive construction • Decreased quality of life • Pandemic • Lack of funds • Vandalism • Existence of large heat islands in the municipality • Bad management, the incorrect arrangement of Sipote park which leads to the destabilization of the area |



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6.4 Vision. Strategic objectives. Key Themes

| Strategic objectives | |
|--|---|
| Overall strategic vision | |
| <p>Suceava will have high quality greenspaces that are multifunctional, inclusive and community driven, supporting habitats, and enabling active and healthy lifestyles for all.</p> | |
|  | <p>Suceava municipality aims to improve the quality of urban life for its citizens in response to various health risks related to rapid urbanization and densification of cities. Thus, the aim is to support and improve the quality urban ecological infrastructure specially designed to provide benefits for health and well-being. The aim is to promote responsible planning and management of urban green areas.</p> |
| Specific objectives (reachable by 2030) | |
| <ul style="list-style-type: none"> - increasing green areas of public/ private buildings - reducing NO_x and particulate matter (PM) emissions and the negative impact of buildings on the environment - increasing the quality of life and changing the architectural aspect of public buildings - increasing quality of life and the level of public health - increasing the level of knowledge of the environment - improving local health - promoting a healthy style of "urban life" - increasing the number of people practicing outdoor fitness activities and who consume healthy products - creating healthy habits, respect for the environment for the younger generations - creating conditions for inhabitants to spend more time in open space -creating conditions for walking -creating infrastructure for cultural events -creating conditions for children to enjoy nature -creating conditions for outdoor education | |
|  | |

The Integrated Action Plan of Suceava city focuses on two of the four Key Themes of “Health and Greenspace – Health responsive planning and management of urban green infrastructure” project, which are *Theme 2: Air quality and noise* and *Theme 4: Lifestyles, social functions, physical activities*.



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Theme 2: Air quality and noise

Pollution is one of the most important topics worldwide and is also becoming increasingly important for the cities and towns in Romania. The air pollution has a direct impact on the quality of life in cities. The air quality in Suceava City is monitored by the Environmental Protection Agency (EPA), using two monitoring stations: SV1 (urban background station, 57 Mărășești Street, “Mihai Eminescu” National College) and SV2 (industrial station, Tineretului Street no. 12, “Țândărică” Kindergarten).



According to the analyses carried out, the main sources of air pollution in Suceava are:

- Industrial activities with specific pollutant emissions depending on the technological processes and dust
- Specific urban activities due to the fuel combustion, generating smoke and ash
- Road traffic with specific pollutant emissions due to the fuel combustion

The noise complaints received by EPA Suceava from citizens in 2019 referred to the discomfort caused by the noise sources near the complainants' homes. These sources were the following: noise caused by crows, gambling machines, fans from a supermarket, sale of construction materials, sheepfold, vehicle sandblasting and painting, truck parking lot, wood cutting workshop. Nevertheless, the main sources of noise are those related to car traffic, which create discomfort to the population, both in the areas immediately adjacent to the road transport routes, as well as in residential areas, parks, other recreation areas.

Suceava municipality is facing environmental problems, such as low air quality due to pollution with suspended powders, intense and crowded traffic, increased ambient noise, greenhouse gas emissions, polluted soil, and waste generation. These environmental problems have significant consequences on the human health, quality of life of citizens and on the economic performance of the city, respectively on the sustainable development of the locality. Therefore, these issues must be analyzed, prioritized and resolved through an action plan.

Theme 4: Lifestyles, social functions, physical activities.

It is common knowledge that in Romania, and particularly in Suceava city, people didn't pay too much attention until recent years to having a healthy lifestyle and practicing physical activities for wellbeing. This consists of a big mentality problem for the citizens and requires a special attention in order to improve “urban life”.



6.5 Small Scale Action (SSA)

Suceava municipality identified the small scale action to be the most appropriate for developing the Integrated Actions Plan as the arrangement of a green roof. Lately, Suceava municipality has become a very crowded city due to the existence of grey infrastructure and the amount of cars that have significantly decreased the air quality. As there are not too many green roofs in the city, the municipality considered this is the first step to be taken towards enlarging green spaces and creating a positive example both for public institutions and for private entities. The arrangement of the green roof was meant for testing this method in small-scale for a larger-scale action intended by the municipality. On the long term, the intention is to replicate this solution on all the terraces of the City Hall's building as well as on other public buildings such as multifunctional centres, Matei Visniec theatre, schools, kindergartens.

The roof that was built is located on the 5th floor of Suceava City Hall building, with a surface of approximately 34 sqm. This is the smallest terrace of the building, situated right next to the meeting room for Local Council of the municipality. Taking this into consideration, a green roof on this terrace is also be standing as a social space, where local counselors can relax during meeting breaks, contributing to their health and wellbeing. Therefore, Suceava municipality made a contract with a specialized firm to make the arrangement for this pilot green roof. For the arrangement of the green roof it was used Sedum roll (carpet) which consists of dwarf succulent plants, this being frequently used for this type of works. The edges of the green roof were made of ornamental crushed stones being used for drainage. Moreover, it was decorated with perennial grasses, perennial flowers and shrubs, placed in pots to benefit from more soil. This chosen solution is more practical and will provide the planted vegetation to be much better observed from the road and outside the building.





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6.6 Actions to be implemented

| SPECIFIC OBJECTIVE 1 | | | | |
|--|-------------------------|----------------------|---|------------------|
| Increasing green areas of public/private buildings | | | | |
| ACTION | RESOURCES/ASSETS | LEAD AGENCY | KEY PARTNERS | TIMESCALE |
| 1.1 "Green" roof on the terraces of public buildings | Grants | Suceava Municipality | Faculty of Forestry, "Stefan cel Mare" University of Suceava, Agency for Environmental Protection (EPA) | 2022-2026 |
| 1.2 "Green roof" on the terraces of educational units | Grants | Suceava Municipality | Educational units, "Stefan cel Mare" University of Suceava, Agency for Environmental Protection | 2022-2026 |
| 1.3 Green wall for public buildings | Grants | Suceava Municipality | "Stefan cel Mare" University of Suceava, Agency for Environmental Protection | 2022-2026 |
| 1.4 Measures for reducing the negative impact of "grey" infrastructure in urban public spaces | Grants | Suceava Municipality | "Stefan cel Mare" University of Suceava, Agency for Environmental Protection | 2022-2028 |
| 1.5 Campaigns for improving landscape aspect of apartment buildings | Local Budgets | Suceava Municipality | Apartment owners' associations, Agency for Environmental Protection | 2022-2027 |

| SPECIFIC OBJECTIVE 2 | | | | |
|---|--|----------------------|---|------------------|
| Reducing NOx and particulate matter (PM) emissions and the negative impact of buildings on the environment | | | | |
| ACTION | RESOURCES /ASSETS | LEAD AGENCY | KEY PARTNERS | TIMESCALE |
| 2.1 Green curtains on the main roads | Local Budget, Grants | Suceava Municipality | Faculty of Forestry, "Stefan cel Mare" University of Suceava, Agency for Environmental Protection | 2022-2028 |
| 2.2 "Low emission zone"- new pedestrian areas | Local Budget, Grants and other sources | Suceava Municipality | Agency for Environmental Protection | 2022-2030 |
| 2.3 Campaigns organized on the main roads for a "green" city | Local Budget | Suceava Municipality | Faculty of Forestry, "Stefan cel Mare" University of Suceava, Agency for Environmental Protection | 2022-2030 |



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| SPECIFIC OBJECTIVE 3 | | | | |
|--|-------------------------|----------------------|--|------------------|
| Promoting a healthy style of "urban life" | | | | |
| ACTION | RESOURCES/ASSETS | LEAD AGENCY | KEY PARTNERS | TIMESCALE |
| 3.1 Activities/ fitness sessions in the green recreational area on Suceava river banks | Local Budget | Suceava Municipality | Faculty of Physical Education and Sports, "Stefan cel Mare" University of Suceava | 2022-2026 |
| 3.2 Organizing jogging sessions on the city's main roads and green areas | Local Budget | Suceava Municipality | Faculty of Physical Education and Sports, "Stefan cel Mare" University of Suceava | 2022-2026 |
| 3.3 Developing a route planning application for citizens | Local Budget | Suceava Municipality | Faculty of Physical Education and Sports, "Stefan cel Mare" University of Suceava | 2022-2026 |
| 3.4 Organizing "cardio circuits" in public parks | Local Budget | Suceava Municipality | Faculty of Physical Education and Sports, "Stefan cel Mare" University of Suceava | 2022-2026 |
| 3.5 Campaigns for combating obesity through physical activities | Local Budget | Suceava Municipality | Faculty of Physical Education and Sports, "Stefan cel Mare" University of Suceava, Public Health Directorate of Suceava County | 2022-2030 |
| 3.6 Creating a set of rules for selling only healthy food and drinks in public parks and recreational areas | Local Budget | Suceava Municipality | Public Health Directorate of Suceava County, "Sfântul Ioan cel Nou" County Emergency Hospital Suceava | 2022-2024 |

| SPECIFIC OBJECTIVE 4 | | | | |
|--|-------------------------|----------------------|---|------------------|
| Increasing quality of life and level of public health | | | | |
| ACTION | RESOURCES/ASSETS | LEAD AGENCY | KEY PARTNERS | TIMESCALE |
| 4.1 Urban furniture in public parks | Local Budget, Grants | Suceava Municipality | General Directorate of Public Domain | 2022-2028 |
| 4.2 Arranging therapeutic areas in parks near health facilities | Local Budget, Grants | Suceava Municipality | Public Health Directorate of Suceava County, "Sfântul Ioan cel Nou" County Emergency Hospital Suceava | 2022-2028 |
| 4.3 Creating a pedestrian path for | Local Budget, Grants | Suceava Municipality | "Stefan cel Mare" University of Suceava, National Museum | 2022-2030 |



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| | | | | |
|--|-----------------------|----------------------|--|------------------|
| weekend cultural activities in open space in the central area | | | of Bucovina, “Matei Visniec” Theatre | |
| 4.4 Creating a pedestrian path between main tourist spots | Local Budget, Grants | Suceava Municipality | “Stefan cel Mare” University of Suceava, National Museum of Bucovina | 2022-2025 |
| 4.5 Creating the infrastructure for cultural open air events in the main public parks | Local Budget, Grants | Suceava Municipality | Stefan cel Mare” University of Suceava, National Museum of Bucovina, “Matei Visniec” Theatre | 2022-2030 |
| 4.6 Natural playgrounds for children | Grants, other sources | Suceava Municipality | Public Health Directorate of Suceava County, Educational units | 2022-2030 |

| SPECIFIC OBJECTIVE 5 | | | | |
|---|--------------------------|----------------------|---|------------------|
| Increasing the level of knowledge of the environment | | | | |
| ACTION | RESOURCE S/ASSETS | LEAD AGENCY | KEY PARTNERS | TIMESCALE |
| 5.1 “Eco school or classes” - practical lessons of biology in nature | Local Budget, Grants | Suceava Municipality | Educational units, “Stefan cel Mare” University of Suceava, Agency for Environmental Protection | 2022-2030 |
| 5.2 Mapping urban vegetation according to local green register | Local Budget, Grants | Suceava Municipality | Educational units, “Stefan cel Mare” University of Suceava, Agency for Environmental Protection | 2022-2025 |
| 5.3”Forest school”- education in green area | Local Budget, Grants | Suceava Municipality | Educational units, “Stefan cel Mare” University of Suceava, Agency for Environmental Protection | 2022-2030 |



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Specific objective 1: Increasing green areas of public/ private buildings

| Activity 1.1. "Green" roof on the terraces of public buildings | | | |
|---|--|-----------|--------------------------------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | Faculty of Forestry, "Stefan cel Mare" University of Suceava, Agency for Environmental Protection | | |
| Expected results | -increasing surface of green areas of public buildings | | |
| | - reducing NOx and particulate matter (PM) emissions and the negative impact of buildings on the environment | | |
| | -increasing the cooling of buildings and changing the architectural aspect of public buildings | | |
| | | Period | Sources of indicators |
| Indicators | -sqm of landscaped green | 2022-2025 | Activity report |
| | -number of public buildings equipped with green roof | 2022-2026 | Activity report and reception report |
| Resources | Grants | | |
| <p>In order to reduce the negative impact of residential areas on environment, "green" roof areas will be arranged on the terraces of public buildings in Suceava (City Hall building, multifunctional centres, cinema, "Matei Vişniec" theatre). According to the model made on the roof terrace from the 5th floor of Suceava City Hall building, "green" roofs will be arranged, namely waterproofing systems, perennial plantations, mosses, low vegetation, irrigation systems and rainwater collection. It will also encourage the expansion of this concept in the private construction sector by introducing a mandatory reassessment for investors wishing to obtain a building permit for residential and other purposes also (trade, protection, etc.). Furthermore, owners' associations will be encouraged to replicate the solution on the terraces of apartment buildings in Suceava.</p> <p>The plants used for the "green" roofs will be selected together with the specialists from the Faculty of Forestry within the "Ştefan cel Mare" University of Suceava, they will be specific to the area, and also a great attention will be paid in framing in the architectural / landscape aspect of the area.</p> <p>ESTIMATED BUDGET: 120 EUR/sqm</p> | | | |





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Activity 1.2 “Green” roof on the terraces of educational units

| | | | |
|-------------------|---|---------------------|--|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | Educational units, “Stefan cel Mare” University of Suceava, Agency for Environmental Protection | | |
| Expected results | -increasing surface of green areas of public buildings | | |
| | -reducing carbon dioxide emissions and the negative impact of buildings on the environment | | |
| | -increasing the cooling of buildings and changing the architectural aspect of public buildings | | |
| Indicators | -sqm of landscaped green | Period 2022-2025 | Sources of indicators Activity report |
| | -number of educational units equipped with green roof | 2022-2026 | Activity report and reception report |
| Resources | Grants | | |

In order to reduce the negative impact of residential areas on environment, "green" roof areas will be arranged on the terraces of public buildings in Suceava of schools, kindergartens. According to the model made on the roof terrace from the 5th floor of Suceava City Hall building, “green” roofs will be arranged, namely waterproofing systems, perennial plantations, mosses, low vegetation, irrigation systems and rainwater collection. For public buildings of educational units (schools, kindergartens, etc.) that are in the inventory list of Suceava municipality, the technical project will include similar arrangement works that were made for the terrace areas of the city hall’s building. The “green” roof will also serve as a social space both for teachers and other people visiting the educational units. The plants used for the “green” roofs will be selected together with the specialists from the Faculty of Forestry within the “Ștefan cel Mare” University of Suceava, they will be specific to the area, and also a great attention will be paid in framing in the architectural / landscape aspect of the area.



ESTIMATED BUDGET: 120 EUR/sqm

Activity 1.3. “Green” wall for public buildings

| | | | |
|-------------------|--|--|--|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | “Stefan cel Mare” University of Suceava, Agency for Environmental Protection | | |
| Expected | -increasing surface of green areas of public buildings | | |
| | -reducing carbon dioxide emissions and the negative impact of buildings on the environment | | |



| | | | |
|--|--|-----------|--------------------------------------|
| results | -increasing the cooling of buildings and changing the architectural aspect of public buildings | | |
| | | Period | Sources of indicators |
| Indicators | -sqm of landscaped green | 2022-2025 | Activity report |
| | -number of public buildings equipped with green wall | 2022-2026 | Activity report and reception report |
| Resources | Grants | | |
|  <p>In order to reduce the negative impact of residential areas on environment, "green" wall areas will be arranged on the public buildings in Suceava (multifunctional centers, "Matei Vişniec" theatre, educational units). "Green" walls will be arranged, namely waterproofing systems, perennial plantations, mosses, low vegetation, irrigation systems and rainwater collection.</p> <p>The plants used for the "green" wall will be selected together with the specialists from the Faculty of Forestry within the "Ştefan cel Mare" University of Suceava, they will be specific to the area, and also a great attention will be paid in framing in the architectural / landscape aspect of the area.</p> <p>ESTIMATED BUDGET: 20.000 EUR</p> | | | |

Activity 1.4. Measures for reducing the negative impact of "grey" infrastructure in urban public spaces

| | | | |
|-------------------|--|-----------|--------------------------------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | "Stefan cel Mare" University of Suceava, Agency for Environmental Protection | | |
| Expected results | -increasing surface of green areas of private buildings | | |
| | -reducing carbon dioxide emissions and the negative impact of buildings on the environment | | |
| | -increasing the quality of life and changing the architectural aspect of private buildings | | |
| | | Period | Sources of indicators |
| Indicators | -sqm of landscaped green | 2022-2028 | Activity report |
| | -number of private buildings equipped with green | 2022-2028 | Activity report and reception report |
| Resources | Local Budget | | |



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This activity consists of creating a set of rules part of Urban planning regulations for reducing the negative impact of grey infrastructure. It will clearly specify the minimum surface of built green space for every new building which is constructed. It will also encourage the expansion of green areas (green roof and green wall) in the private construction sector by introducing a mandatory reassessment for investors wishing to obtain a building permit for residential and other purposes also (trade, protection, etc.).
ESTIMATED BUDGET: 5.000 EUR



Activity 1.5. Campaigns for improving landscape aspect of apartment buildings

| | | | |
|-------------------|--|-----------|--------------------------------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | Apartment owners` associations, Agency for Environmental Protection | | |
| Expected results | -increasing surface of green areas of private buildings | | |
| | -reducing carbon dioxide emissions and the negative impact of buildings on the environment | | |
| | -increasing the quality of life and changing the architectural aspect of private buildings | | |
| | | Period | Sources of indicators |
| Indicators | -sqm of landscaped green | 2022-2027 | Activity report |
| | -number of private buildings equipped with green areas | 2022-2027 | Activity report and reception report |
| Resources | Local Budget | | |



This activity consists of encouraging citizens through apartment owners` associations to increase the green space surface of apartment buildings. There will be campaigns for planting trees and flowers, for cleaning the green space and for arranging “green” roof and wall. It will also be organized a contest for the most beautiful residential area.

ESTIMATED BUDGET: 15.000 EUR



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Specific objective 2: Reducing NO_x and particulate matter (PM) emissions and the negative impact of buildings on the environment

| Activity 2.1. "Green" curtains on the main roads | | | |
|---|---|-----------|--------------------------------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | Faculty of Forestry, "Stefan cel Mare" University of Suceava, Agency for Environmental Protection | | |
| Expected results | -increasing surface of green areas | | |
| | - reducing NO _x and particulate matter (PM) emissions and the negative impact of road traffic on the environment | | |
| | -increasing the quality of life and changing the architectural aspect of the city | | |
| | | Period | Sources of indicators |
| Indicators | - percentage of NO _x and particulate matter (PM) emissions reduction | 2022-2028 | Activity report |
| | -number of public buildings equipped with green roof | 2022-2028 | Activity report and reception report |
| Resources | Local Budget, Grants | | |
| <p>Planting trees with high NO_x and particulate matter (PM) emissions retention capacity, in alignment with major traffic arteries on which high volumes of traffic is recorded and along the axes of neighborhoods with the role of natural barriers, in order to reduce the impact of transport activity on the environment. The selection of the species of trees and shrubs that will constitute the green curtains will be made</p>  <p>according to the pedo-climatic conditions specific to the Municipality of Suceava and to the degree of adaptation of the proposed species to these conditions. The species of trees chosen will be salt resistant. The selection of those with high specific NO_x and particulate matter (PM) emissions retention capacity will also be considered, as well as integration into the urban landscape.</p>  | | | |
| ESTIMATED BUDGET: 500.000 EUR | | | |

| Activity 2.2. "Low emission zone" – new pedestrian areas | | | |
|--|---|--|--|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | Agency for Environmental Protection | | |
| Expected results | -increasing surface of green areas | | |
| | - reducing NO _x and particulate matter (PM) emissions and the negative impact of road traffic on the environment | | |
| | -increasing the quality of life and changing the architectural aspect of the | | |



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| | | | |
|--|---|-----------|-------------------------------|
| | | city | |
| | | Period | Sources of indicators |
| Indicators | -sqm of pedestrian area | 2022-2030 | Activity report |
| | -number of pedestrians using the new facilities | 2022-2030 | Activity and reception report |
| Resources | Local Budget, Grants and other sources | | |
| <p>This intervention will be applied in the Central area of Suceava Municipality by reorganizing the traffic on Str. Ștefan cel Mare (in the South area) and on the road infrastructure connecting the Central Square and Str. Stephen the Great (in the North). It will be extended to the area currently dedicated exclusively for pedestrians (Ștefan cel Mare Street, between Curtea Domnească Street and Mitropoliei Street). Car traffic will be restricted, except for supply and emergency vehicles. This intervention will be integrated with others aimed at discouraging the use of personal cars, while ensuring that traffic problems are not relocated to other areas. ESTIMATED BUDGET: 440.000 EUR</p> | | | |



| Activity 2.3. Campaigns organized on the main roads for a “green” city | | | |
|---|---|-----------|--------------------------------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | Faculty of Forestry, “Ștefan cel Mare” University of Suceava, Agency for Environmental Protection | | |
| Expected results | -reducing car traffic | | |
| | -reducing carbon dioxide emissions and the negative impact of road traffic on the environment | | |
| | -increasing the quality of life | | |
| | | Period | Sources of indicators |
| Indicators | -number of pedestrians | 2022-2030 | Activity report |
| | -number of cars in traffic | 2022-2030 | Activity report and reception report |
| Resources | Local Budget | | |
|  | <p>Campaigns on the main roads for encouraging citizens on having a “green” city. These will consist in changing the behaviour of Suceava’s citizens to start walking or to use other ecological transport means more (bikes, electric scooters etc) and to renounce taking the car every time they get out of the house. Citizens will be explained all the benefits of having a “green” city and they will understand the importance every person has on having a green city. ESTIMATED BUDGET: 8.000 EUR</p> | | |



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Specific objective 3: Promoting a healthy style of "urban life"

| Activity 3.1. Activities/ fitness sessions in the green recreational area on Suceava river banks | | | |
|--|---|-----------|-----------------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | Faculty of Physical Education and Sports, "Stefan cel Mare" University of Suceava | | |
| Expected results | -increasing the number of people practicing outdoor fitness activities | | |
| | -improving health at local level | | |
| | -promoting a healthy style of "urban life" | | |
| | | Period | Sources of indicators |
| Indicators | -number of people practicing fitness outdoor | 2022-2026 | Activity report |
| | -number of outdoor fitness activities | 2022-2026 | Activity report |
| Resources | Local Budget, Public-private partnership | | |
| <p>The city of Suceava in partnership with "Ștefan cel Mare" University of Suceava- The Faculty of Physical Education and Sports will organize a program of outdoor fitness activities in the space of the recreational area arranged on Suceava river banks.</p> <p>Sessions will be organized on age groups and categories of citizens (pupils, students, adults, pensioners), at different hours of the day and year, so that these sessions are accessible to as many citizens as possible. In the recreation area on Suceava river banks</p>   <p>there are the minimum facilities necessary for carrying out these activities (yoga platform on a rubber mat, event platform (asphalt), green space area (grass roller mat). All activities will include fitness sessions specially designed for each age category and will be led by specialized instructors from the Faculty of Physical Education and Sports from "Stefan cel Mare" University Suceava.</p> <p>Actions will be carried out to promote and publicize these activities in order to increase the degree of attractiveness and the number of participants in all these actions. The actions will be integrated with complementary outdoor activities (music concerts, exhibitions) so as to ensure as many participants as possible. The recreational area is equipped with 12.5 km of bike paths, so that within these actions will be also carried out activities of cycling, skating, etc.</p> <p>ESTIMATED BUDGET: 5.000 EUR</p> | | | |



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Activity 3.2. Organizing running sessions on the city's main roads and green areas

| | | | |
|---|---|-----------|-----------------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | Faculty of Physical Education and Sports, "Stefan cel Mare" University of Suceava | | |
| Expected results | -increasing the number of people practicing outdoor activities | | |
| | -improving health at local level | | |
| | -promoting a healthy style of "urban life" | | |
| | | Period | Sources of indicators |
| Indicators | -number of people practicing outdoor running | 2022-2026 | Activity report |
| | -number of outdoor running actions | 2022-2026 | Activity report |
| Resources | Local Budget | | |
| <p>The city of Suceava in partnership with "Ștefan cel Mare" University of Suceava- The Faculty of Physical Education and Sports will organize a program of running sessions on the main roads and green areas of the city. Sessions will be organized on age groups and categories of citizens (pupils, students, adults, pensioners), at different hours of the day and year, so that these sessions are accessible to as many citizens as possible. There will be also contests with prizes for each category.</p> <p>Actions will be carried out to promote and publicize these activities in order to increase the degree of attractiveness and the number of participants in all these actions.</p> <p>ESTIMATED BUDGET: 10.000 EUR</p> | | | |

Activity 3.3. Developing a route planning application for citizens

| | | | |
|-------------------|---|-----------|-----------------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | Faculty of Physical Education and Sports, "Stefan cel Mare" University of Suceava | | |
| Expected results | -increasing the number of people using ecological transport | | |
| | -improving health at local level | | |
| | -promoting a healthy style of "urban life" | | |
| | | Period | Sources of indicators |
| Indicators | -number of people using the application | 2022-2026 | Activity report |
| | -number of people choosing ecological routes | 2022-2026 | Activity report |
| Resources | Local Budget | | |



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The city of Suceava in partnership with “Ștefan cel Mare” University of Suceava- The Faculty of Physical Education and Sports will organize a route planning for the inhabitants of Suceava city. Therefore, a phone application will be developed with routes suggestions from home to different parts of the city, such as school, work, shopping etc. They will offer alternative routes focusing more on walking and ecological transport (bikes, electric scooter etc) than using the private car. The alternative routes will be completed by all the advantages offered by the route (reduced duration of travel from home to school and from home to work, no need of parking place, calories burned etc)



ESTIMATED BUDGET: 10.000 EUR

Activity 3.4. Organizing “cardio circuits” in public parks

| | | | |
|-------------------|---|-----------|--|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | Faculty of Physical Education and Sports, “Ștefan cel Mare” University of Suceava | | |
| Expected results | -increasing the number of people practicing outdoor activities | | |
| | -improving health at local level | | |
| | -promoting a healthy style of "urban life" | | |
| Indicators | -number of people practicing outdoor activities | 2022-2026 | Sources of indicators Activity report |
| | -number of outdoor actions | 2022-2026 | Activity report |
| Resources | Local Budget | | |



The city of Suceava in partnership with “Ștefan cel Mare” University of Suceava- The Faculty of Physical Education and Sports will organize a program of cardio circuits in the main public parks.

Sessions will be organized on age groups and categories of citizens (pupils, students, adults, pensioners), at different hours of the day and year, so that these sessions are accessible to as many citizens as possible. There will be also contests with prizes for each category. Actions will be carried out to promote and publicize these activities in order to increase the degree of attractiveness and the number of participants in all these actions.

ESTIMATED BUDGET: 10.000 EUR



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Activity 3.5. Campaigns for combating obesity through physical activities

| | | | |
|-------------------|--|-----------|------------------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | Faculty of Physical Education and Sports, "Ștefan cel Mare" University of Suceava, Public Health Directorate of Suceava County | | |
| Expected results | -increasing the number of people practicing outdoor activities | | |
| | -improving health at local level | | |
| | -promoting a healthy style of "urban life" | | |
| | | Period | Sources for indicators |
| Indicators | -number of people practicing physical activities | 2022-2030 | Activity report |
| | -number of outdoor actions | 2022-2030 | Activity report |
| Resources | Local Budget | | |

The city of Suceava in partnership with "Ștefan cel Mare" University of Suceava- The Faculty of Physical Education and Sports and Public Health Directorate of Suceava County will conduct a campaign for decreasing the level of obesity through physical activity for the citizens of Suceava city. Inhabitants will receive information regarding risks associated with obesity and the importance of combating it through physical activity.

ESTIMATED BUDGET: 5.000 EUR

Activity 3.6. Creating a set of rules for selling only healthy food and drinks in public parks and recreational areas

| | | | |
|-------------------|---|-----------|-----------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | Public Health Directorate of Suceava County, "Sfântul Ioan cel Nou" County Emergency Hospital Suceava | | |
| Expected results | -increasing the number of people consuming healthy products | | |
| | -improving health at local level | | |
| | -promoting a healthy style of "urban life" | | |
| | | Period | Sources |
| Indicators | -number of people buying healthy food | 2022-2024 | Activity report |
| | -number of people buying healthy drinks | 2022-2024 | Activity report |
| Resources | Local Budget | | |

The city of Suceava in partnership with Public Health Directorate of Suceava County and "Sfântul Ioan cel Nou" County Emergency Hospital Suceava will work together in creating a set of rules to be included in Urban Planning Regulations according to which private investors can only sell particular products inside public parks and recreational areas.

ESTIMATED BUDGET: 5.000 EUR





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Specific objective 4: Increasing quality of life and level of public health

| Activity 4.1. Urban furniture in public parks | | | |
|--|---|-----------|-----------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | General Directorate of Public Domain | | |
| Expected results | -creating conditions for inhabitants to spend more time in open space | | |
| | -increasing quality of life and level of public health | | |
| | | Period | Sources |
| Indicators | -number of pieces of urban furniture | 2022-2028 | Activity report |
| | -number of people spending time in public parks | 2022-2028 | Activity report |
| Resources | Local Budget, Grants | | |
|  | <p>The action consists of equipping public parks from Suceava city, including small parks from residential areas, with urban furniture. Public parks will be modernized with benches offering more conditions to spend time in open space green areas, contributing to the wellbeing of citizens of all ages.</p> <p>ESTIMATED BUDGET: 15.000 EUR</p> | | |

| Activity 4.2. Arranging therapeutic areas in parks near health facilities | | | |
|---|--|-----------|-----------------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | Public Health Directorate of Suceava County, “Sfântul Ioan cel Nou” County Emergency Hospital Suceava | | |
| Expected results | -creating conditions for inhabitants to spend more time in open space | | |
| | -increasing quality of life and level of public health | | |
| | -creating conditions for a fast recovery process | | |
| | | Period | Sources of indicators |
| Indicators | -number of therapeutic areas arranged | 2022-2028 | Activity report |
| | -number of patients using therapeutic areas | 2022-2028 | Activity report |
| Resources | Grants, other sources | | |



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The action consists of arranging therapeutic gardens inside parks that are situated in the vicinity of health facilities. Parks will incorporate therapeutic environments that will be developed based on best practices and evidence-based design principles relating to therapy to help improve mental well-being. Some of the features will include raised planters and seating areas that accommodate and provide greater accessibility to wheelchair users. For those seeking some tranquility and a chance to unwind, there will be elements for them to interact with, such as fragrant and brightly-colored plants and flowers.

ESTIMATED BUDGET: 30.000 EUR

Activity 4.3. Creating a pedestrian path for weekend cultural activities in open space in the central area

| | | | |
|-------------------|---|-----------|-----------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | "Stefan cel Mare" University of Suceava, National Museum of Bucovina, "Matei Visniec" Theatre | | |
| Expected results | -creating conditions for inhabitants to spend more time in open space | | |
| | -increasing quality of life and level of public health | | |
| | -creating conditions for recovering faster | | |
| | | Period | Sources |
| Indicators | -area of pedestrian path | 2022-2030 | Activity report |
| | -number of participants | 2022-2030 | Activity report |
| Resources | Local Budget, Grants | | |

The action consists of creating a pedestrian path for cultural activities to be organized in weekend days. The pedestrian area will be starting from the roundabout situated in front of Matei Visniec Theatre (intersection of Mihai Eminescu street- Mihai Viteazul street-Nicolae Balcescu street- Vasile Alecsandri street- Dragos Voda street), continuing on Nicolae Balcescu street to its intersection with Ana Ipatescu street. The pedestrian area will be large enough for hosting all kind of activities such as theatre plays, open air cinema, exhibitions etc, ESTIMATED BUDGET: 15.000 EUR

Activity 4.4. Creating a pedestrian path between main tourists spots

| | | | |
|-------------------|--|--------|-----------------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | "Stefan cel Mare" University of Suceava, National Museum of Bucovina | | |
| Expected results | -creating a route dedicated to pedestrian traffic | | |
| | -increasing quality of life and level of public health | | |
| | -creating conditions for walking | | |
| | | Period | Sources of indicators |



| | | | |
|--|---------------------------------|-----------|-----------------|
| Indicators | -length of pedestrian path | 2022-2025 | Activity report |
| | -information panels/ indicators | 2022-2025 | Activity report |
| Resources | Local Budget, Grants | | |
| <p>Creation of a route dedicated to pedestrian traffic that would link the tourist and pilgrimage objectives in Suceava Municipality: Cetatea de Scaun - Church of the Ladies - St. Dumitru Church - Stefan cel Mare pedestrian area - Bucovina Museum. It will be arranged and marked separately. It will contain information panels and / or indicators indicating the main objectives. ESTIMATED BUDGET: 15.000 EUR</p> | | | |

Activity 4.5. Creating the infrastructure for cultural open air events in the main public parks

| | | | |
|---|---|-----------|-----------------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | "Stefan cel Mare" University of Suceava, National Museum of Bucovina, "Matei Visniec" Theatre | | |
| Expected results | -creating infrastructure for cultural events | | |
| | -increasing quality of life and level of public health | | |
| | | Period | Sources of indicators |
| Estimated indicators | -number of infrastructure | 2023-2030 | Activity report |
| | - number of participants at cultural events | 2023-2030 | Activity report |
| Resources | Local Budget, Grants | | |
| <p>This activity consists of creating the infrastructure for organizing cultural events in public parks such as an amphitheatre. This infrastructure will be appropriate for organizing all kind of cultural activities namely theatre plays, open air cinema, concerts, exhibitions etc.</p> | | | |
| ESTIMATED BUDGET: 30.000 EUR | | | |

Activity 4.6. Natural playgrounds for children

| | | | |
|-------------------|--|--------|------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | Public Health Directorate of Suceava County, Educational units | | |
| Expected results | -creating conditions for children to spend more time in open space | | |
| | -increasing quality of life and level of public health | | |
| | - creating conditions for children to enjoy nature | | |
| | | Period | Sources of |



| | | | |
|------------|---|-----------|-----------------|
| | | | indicators |
| Indicators | -number of natural playgrounds | 2022-2030 | Activity report |
| | -number of children using natural playgrounds | 2022-2030 | Activity report |
| Resources | Grants, other sources | | |

The action consists of building natural playgrounds for children. Natural playgrounds are play environments that blend natural materials, features, and vegetation with creative landforms to create purposely complex play spaces with high levels of play value. Natural Playgrounds provide children with all the same benefits as typical playgrounds: gross motor activity, risk taking, problem solving, social interaction, etc. Natural Playgrounds also teaches children about the wonders and intricacies of the natural world. A totally natural playground creates a beautiful, outdoor play and learning environment. Play components could include: earth shapes, hills to roll down, environmental art, trees to climb, logs to climb through, shrubs, grasses, flowers, boulders or other rock structures, dirt and sand, natural fences (stone, willow, wooden), textured pathways, and, natural water features. Natural Playgrounds are perfect for schools as they can also function as outdoor classrooms. Natural Playgrounds often cost much less to design and create than traditional playgrounds.



ESTIMATED BUDGET: 15.000 EUR

Specific objective 5: Increasing the level of knowledge of the environment

| Activity 5.1. “Eco school or classes”- practical lessons of biology in nature | | | |
|---|---|-----------|-----------------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | Educational units, “Stefan cel Mare” University of Suceava, Agency for Environmental Protection | | |
| Expected results | -creating healthy habits, respect for the environment for the younger generations | | |
| | -increasing quality of life and level of public health | | |
| | -increasing level of knowledge of the environment | | |
| | | Period | Sources of indicators |
| Indicators | -number of students participating at activities | 2022-2030 | Attendance list |
| | -number of outdoor educational activities | 2022-2030 | Activity report |
| Resources | Local Budget, Grants | | |



Among the periodical activities of “Eco school or classes” there will be carried out didactic activities (with pupils, students, and teachers) in areas of green spaces, recreational areas, public parks in Suceava city. Within these didactic activities, knowledge about nature, vegetation, environment, environmental protection measures, civic consultancy, etc. will be taught / acquired.

Each activity will have a practical component. More precisely, in Șipote Park (dendrological park) located in the central area of Suceava, activities will be carried out on identifying plant species (trees, shrubs, perennials), plant care, planting new species, protection measures, pest prevention and others.

Also, the participants will be informed about the landscape measures necessary for the arrangement of new green and planted spaces, their integration in urban architecture, as well as protected species and species that are specific to the area.

ESTIMATED BUDGET: 20.000 EUR

Activity 5.2. Mapping urban vegetation according to local green register

| | | | |
|-------------------|--|-----------|-----------------------|
| Action leader | Suceava Municipality | | |
| Organization type | Local public authority | | |
| Main Partners | “Stefan cel Mare” University of Suceava, Agency for Environmental Protection | | |
| Expected results | - increasing level of knowledge of the environment | | |
| | -increasing quality of life and level of public health | | |
| | | Period | Sources of indicators |
| Indicators | -number of urban vegetation mapped | 2022-2025 | Attendance list |
| | -number of panels | 2022-2025 | Activity report |
| Resources | Local Budget, Grants | | |



This activity consists of mapping urban vegetation in the entire city of Suceava. A detailed analysis of all existent vegetation will be made, according to the tree register. There will be installed panels with the name of the species together with a QR code. In addition to this, a phone application will be created.

ESTIMATED BUDGET: 10.000 EUR

Activity 5.3. “Forest school”- education in green area

| | |
|-------------------|---|
| Action leader | Suceava Municipality |
| Organization type | Local public authority |
| Main Partners | Educational units, “Stefan cel Mare” University of Suceava, Agency for Environmental Protection |



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| | | | |
|------------------|---|-----------|-----------------------|
| Expected results | -creating healthy habits, respect for the environment for young generations | | |
| | -increasing quality of life and level of public health | | |
| | -increasing level of knowledge of the environment | | |
| | | Period | Sources of indicators |
| Indicators | -number of participating students | 2022-2030 | Attendance list |
| | -number of outdoor educational activities | 2022-2030 | Activity report |
| Resources | Local Budget, Grants | | |

In the pandemic time one of the measures taken by the authorities to combat the spread of the new coronavirus was to close schools. School activities were moved to the online environment, but students and teachers soon felt the lack of direct interaction. A solution to this problem is the development of educational activities in the open air, where social distance measures can be observed. Suceava municipality has recently received under administration a forested slope located at the northern edge of the George Enescu and Zamca neighborhoods. This small forest can be easily reached on foot from several schools and kindergartens, but there is also the possibility to reach the edge of the forest by car or public transport. Inside the forest there are natural trails, unpaved paths, used by citizens for walking or sports activities. There are also historical vestiges (Zamca Fortress, Zamca Fortified Monastery), elements of the old railway between Ițcani and Suceava) and natural areas of interest for educational activities of biology, zoology, environmental protection and geography. Educational routes - thematic educational routes will be arranged to highlight the biodiversity existing at different times of the year, historical vestiges and natural phenomena such as soil erosion or landslides. Routes will be made to facilitate learning through discovery, especially for young children. There will be various “clues” on the trails that children will need to find and solve “challenges” that will lead them to the following clues and challenges. QR code plates will be installed on trees or areas with botanical species of interest and information panels will be placed about the existing species, so that children can identify the plant and animal species specific to the respective route. Furthermore, a mobile application dedicated to the Zamca forest will be developed, provided with a virtual guide, applied lessons, activity proposals and maps to the points of interest that will be identified and arranged (eg "Valley of wild cherries", " The spring under the monastery ”etc.).



ESTIMATED BUDGET: 20.000 EUR



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6.7 Funding scheme

The planned actions of the IAP will be funded from local budget resources completed by integrated use of national and EU support opportunities. The majority of the small planned actions will be secured from local budget while others will be integrated in other bigger projects which will be funded through ERDF for the next programming period 2021-2027. Private sector will also be involved in these actions through public-private partnership. In addition, for some of the actions that are suitable, volunteers and NGOs will be involved for achieving the expected results.

EUROPEAN COMMISSION PRIORITIES FOR 2021-2027

In 2021-2027 EU cohesion policy has set a shorter, modern menu of 5 policy objectives supporting growth for the period 2021-2027. The most crucial for implementation of green and blue infrastructure is objective 2, concerning a greener, low-carbon transitioning towards a net zero carbon economy, but also other priorities can be linked with some aspects of greenery in the cities, especially related to a more competitive and smarter Europe (new job positions) and a more social and inclusive Europe (social aspects of greenery).

FUNDS PRIORITIES

The European Regional Development Fund will support investments all five policy objectives, but objectives 1 and 2 (a greener, low-carbon transitioning towards a net zero carbon economy) are the main priorities.

INTERREG EUROPE

In 2021-2027, Interreg will continue to support cross border mobility, and efforts to develop environmental protection, emergency services, skilled jobs and access to public services for the next EU generation. More detail information on 2021-2027 period will be added, when they will be officially announced.

URBACT IV

The URBACT programme is the European Territorial Cooperation programme aiming to foster sustainable integrated urban development in cities across Europe. It is an instrument of the Cohesion Policy, co-financed by the European Regional Development Fund, the 28 Member States, Norway & Switzerland. More detail information on 2021-2027 period will be added, when they will be officially announced.

HORIZON EUROPE 2021-2027

Horizon Europe is the 9th European Union Framework Programme for Research and Innovation. It is the biggest and most ambitious programme of its kind ever with a budget of over €95 billion. The 5 defined missions are related to cancer, carbon neutral cities, climate



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change, oceans and waters, and soil health. The missions will be an integral part of the Horizon Europe framework programme.

The Horizon Europe strategic plan defines four key strategic orientations and in each green aspects can be found :

- Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains to accelerate and steer the digital and green transitions through human centred technologies and innovations.
- Restoring Europe's ecosystems and biodiversity, and managing sustainably natural resources to ensure food security and a clean and healthy environment.
- Making Europe the first digitally enabled circular, climate-neutral and sustainable economy
- Through the transformation of its mobility, energy, construction and production systems.

Creating a more resilient, inclusive and democratic European society, prepared and responsive to threats and disasters, addressing inequalities and providing high-quality health care, and empowering all citizens to act in the green and digital transitions. From 3 pillars of Horizon Europe especially second one is interesting for the City as potential source of funding. The Global Challenges and European Industrial Competitiveness pillar supports research relating to societal challenges and reinforces technological and industrial capacities through 6 clusters, where 3 of them seems to be the best option, according to challenges mentioned in the IAP:

- Cluster 1 Health
- Cluster 3 Climate, Energy and Mobility
- Cluster 6 Food, Bioeconomy, Natural Resources, Agriculture and Environment.