

## FORMS OF COOPERATION AIMED AT IMPLEMENT SUSTAINABLE DEVELOPMENT IN URBAN AREAS

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**Purpose:** The aim of this paper is to identify opportunities for cooperation and to show the role it plays in the context of sustainable development in urban areas.

**Design/methodology/approach:** Based on a review of the available literature and the current legislation, the paper discusses the basic concepts of sustainable urban development and addresses the key objectives of cohesion policy in this regard. Thanks to the information made available in the EU websites, the European Urban Initiative, a portal providing solutions aimed at promoting cooperation between cities and supporting them in the implementation of sustainable development measures, has been characterised. Using the case study method, a detailed description/analysis of three selected projects (implemented as a response to challenges of a local nature and in line with the objectives of cohesion policy) was carried out. The projects have been recognised as innovative and easily replicable by other entities.

**Findings:** The deliberations presented in this paper have made it possible to point out opportunities for cooperation, both between cities and partnerships within them. In this respect, particular emphasis has also been placed on the benefits of cooperation in developing solutions to the challenges of the local environment.

**Research limitations/implications:** The study is qualitative in nature. Among the main limitations, it is worth mentioning the shortcomings of the projects' documentation used in the case study. It should also be assumed that the next study in this area will be of a quantitative nature, where the interrelation between the use of territorial instruments and the degree of implementation of strategic objectives will be verified.

**Social implications:** The contents discussed below prove the validity of disseminating the principles of sustainable development in urban areas, both from the point of view of developing the various aspects of economic life and of involving residents in this process. At this point, it is also worth referring to the solutions indicated in the case studies, which have been introduced to meet the needs of the local community.

**Originality/value:** The paper presents the cities' possible options of implementing innovative solutions in the field of sustainable development. In this regard, digital platforms were pointed out, where relevant knowledge is gathered and disseminated, including know-how.

**Keywords:** Sustainable urban development, partnership, European Union.

**Category of the paper:** Case study, literature review.

## **1. Introduction**

On the basis of legal regulations currently in force, available scientific literature as well as strategic documents relating to local development, it can be concluded that the issue of strategic urban development is being gradually developed in each of the mentioned fields. Local authorities, facing the challenges of today's environment, have to meet the ever-increasing expectations of all the involved entities, including not only the European Union, but also other local authorities and, above all, the local community; i.e., the main recipients of public services. Urban development affects every sphere of economic life. Undoubtedly, it should be thought of as improving accessibility to and quality of provided services, which in effect increases the attractiveness and competitiveness of cities against other entities. As shown by the hitherto practice of local government units, initiating cooperation between cities turns out to be particularly effective since it results in a constructive interaction producing beneficial effects to all the participants.

This cooperation is an aspect particularly emphasised in the field of sustainable urban development, where it can take place at local, regional or international level. What's more, it does not have to be limited to local and regional authorities, but can also involve entities with a completely different forms of activities, for example: private companies, universities, social organisations, etc. The cooperation brings many benefits, not least of which is the innovative approach to working out and implementing the solutions.

The issue of urban development, including the integration of the governance process and the territories under the administration of local authorities, is a current topic of deliberations across the entire European Union. This study addresses the issue of sustainable development of the aforementioned areas. In this regard, the objectives of cohesion policy are particularly highlighted and the role of the European Union in the dissemination of innovative urban projects is emphasised. The aim of this paper was to point out opportunities for cooperation and to show the role it plays in the context of sustainable development in urban areas.

## **2. Literature Review**

### **2.1. Sustainable Urban Development (SUD) in the context of cohesion policy**

According to the European Commission, urban development takes place in many different spheres, encompassing environment, economy, society and culture. As these areas are being improved simultaneously, achieving success in the development of a city as a whole requires the implementation of an integrated approach. For example, processes that aim to improve the physical functioning of cities, through infrastructure development, must interact with other

areas. Thus of key importance in this respect is the well-established cooperation that takes place at every level of economic life and occurs between citizens, businesses and public authorities. It should be mentioned that this way of working responds to the challenges cities are currently facing, and this is related to, among other things, the transformation from a linear to a circular economy, the development of the digital transformation, the demographic changes brought about by the influx of migrants in individual countries, and also the economic changes caused by fluctuations in the labour market and the development of society (European Commission).

In this context, it is worth pointing out the role of cohesion policy, which sets out the European Union's investment guidelines. Its primary task is to ensure that the aforementioned digital and environmental transformation takes place in an equitable manner. The time horizon of the current guidelines covers a period from 2021 to 2027. Urban development also has its place within these endeavours and is being implemented in line with the objective to bring 'Europe Closer to Citizens.' Cohesion policy aims at supporting development strategies at a territorial level, that is at the level of cities and local communities, and at the same time indicating their potential for development. It specifies the investments which are to be effectuating projects previously defined in strategic documents. The strategy of sustainable urban development requires collective participation and the implementation of integrated actions relevant to the needs of the designated territories. In practice, these strategies help to achieve sustainable development goals in the local context (European Commission, 2022).

Local development is seen here as a complex process of managing changes, based on the cooperation of all stakeholders aiming to improve and expand public services at community level. It enables participation in defining and verifying specific tasks and, at a later stage, also evaluating the results resulting from these tasks (Brasili, 2011).

As already observed, the international context for considering issues related to sustainable urban development is grounded in the strategic assumptions developed at EU level. It ought to be noted that it is the result of input from all levels of public authority; i.e., from the international, to the national, regional and ultimately local. Particularly emphasised in this approach is the role of the public authority at the national level, the one which is responsible for shaping national policies. It serves as a bridge between entities, assumptions and instruments of an international nature and the units of a lower level; i.e., those directly involved to the implementation of assumptions in urban areas (Handbook of Sustainable Urban Development Strategies).

Tasks aimed at achieving sustainable urban development are by definition striving for social and economic growth that does not harm the environment and maintains a balance between the local community and resources. Achieving this balance shows how the integration of citizens' actions and the involvement of the scientific community brings positive results. It is an added value that distinguishes the indicated approach to urban development from the classical approach to sustainable development. Challenges posed by urban environment mean that cities are subject to constant and successive changes. Thus, planning plays here an important role.

In practice, it is regarded as a process for presenting an entity's vision in the form of priorities. Well-worked out, detailed development guidelines can lead to attracting new investors and initiating additional investment, which contributes to the attractiveness of cities. From this perspective, planning can also be seen as participatory management (Rasoolimanesh et al., 2011).

Many approaches to the issue of sustainable urban development can be found in the literature. But whatever the interpretation, the fact that it is tackled in several urban systems at the same time; i.e., environmental, economic and social, is considered a common feature (Zhang et al., 2011). T. Dixon and M. Eames perceive it as a development for the sustainable improvement of the social and ecological condition of cities (Dixon, Eames, 2014). According to A. Abu Bakar and K. Cheen, sustainable urban development takes place at the environmental, social, economic, cultural and technological levels. The authors also emphasise the aspect of housing, which in their opinion can be considered sustainable when each resident has their own dwelling, which is an expression of self-reliance and social cohesion (Abu Bakar, Cheen, 2013). According to the BEQUEST protocol, the objective of sustainable urban development is to improve the living conditions of the residents, especially as the urban population continues to expand (Deakin et al., 2007). It is pointed out that the measures implemented in this field should correspond to top-down standards, which in practice facilitate the evaluation of sustainable urban development (Deakin, Reid, 2014). D. Mazutis and L. Sweet emphasise that all transformations towards sustainable urban development are the result of direct involvement of local communities in self-initiated projects, so-called social innovations. Among the barriers to the implementation of accepted assumptions, they see a spectrum of interdependent reactions; i.e., institutional, concerning standardisation, team and individual responses (Mazutis, Sweet, 2022). The concept of sustainable urban development seeks to even out disparities between the aforementioned areas, which become sustainable when they are characterised by (Amoushahi et al., 2022):

- stable and competitive economy guaranteeing a high quality of life for residents;
- promotion and dissemination of measures to protect the environment and reduce the consumption of its resources;
- applying solutions to minimise greenhouse gas emissions;
- working towards eradicating poverty and social inequality.

Achieving the aforementioned balance, inter alia, by promoting the participation of different groups of stakeholders in the development planning process, increases social inclusion in urban areas (Rasoolimanesh et al., 2012).

Given the importance of sustainable urban development and its consequent influence on the shape of the local, national and international economy, the 2014-2020 Cohesion Policy has defined regulations to ensure its implementation in each Member State. It was decided that the implementation of the strategic objectives follows an integrated approach based on territorial investment; i.e., integrated territorial investment (ITI) and community-led local development

(CLLD). These tools make it possible to combine the financial aspect (eligibility for various funds) with the social aspect (local community involvement). It should be noted that the objectives of the current cohesion policy, for the years 2021-2027, are exactly the same as in the previous period, with an increase of the minimum amount of funds allocated for these projects from the European Regional Development Fund (ERDR) (Pertoldi, Busti, 2020). In addition, the range of available tools has been expanded to include other territorial instruments (Minister of Development Funds and Regional Policy, 2022). It is worth mentioning that the introduction of the aforementioned instruments stems from the necessity of having a more integrated policy in urban areas (Tosics, 2017). Table 1 presents the different approaches to the core and purpose of the territorial investments, with the most widespread solutions being indicated; i.e., ITI and CLLD.

**Table 1.**  
*Characteristics of selected territorial investments*

<b>Integrated Territorial Investments (ITI)</b>
It is pointed out that ITI have been introduced with the intention of financing the sustainable development of territorially demarcated areas, including urban districts and entire cities, metropolitan areas, as well as partnerships of local and regional self-governments (Gaman et al., 2015).
The investments are directed towards solving various problems affecting demarcated territories. The ITI funds are a form of subsidy for public entities, thus guaranteeing their participation in the development process of the given area. Multi-level participation is particularly emphasised. The high effectiveness of these measures is due to the fact that all the described aspects must be coherent with each other within an integrated management strategy (Garcia-Ayllon, 2018).
ITI lead to the elimination of problems of territorial differentiation caused by the disparity between the formal (legally regulated) and actual conditions under which cities operate. They enables development planning according to a strategic approach (Tosics, 2017).
The main goal of ITI is to implement the principles of territorial governance, where the nature of cooperation plays a particularly important role. In practice, the form of participation between local authorities can affect the extent to which the objectives are achieved, including the strategic planning and management of cities. (Kociuba, 2018).
J. Krukowska and M. Lackowska identify the use of the ITI as a necessity to introduce top-down changes dictated by the process of Europeanisation, which ultimately results in the implementation of specific solutions at the local level. The authors also draw attention to the bottom-up dimension of Europeanisation, which starts in urban areas as their response to the needs reported for the implementation of sustainable development projects (Krukowska, Lackowska, 2017).
<b>Community-led local development (CLLD)</b>
Managing urban development on the basis of CLLD, i.e., a territorial tool in which local community involvement plays a dominant role, results in a lack of direct participation of public and private entities in the decision-making process. This way of implementing sustainable urban development projects takes into account the participation of citizens in the planning and implementation process, mainly in the districts in need of special support (in this case activities are limited to specific sectors and not entire areas). This tool implies a more democratic way of planning city development (Tosics, 2017).
CLLD can be funded from many sources and is therefore multi-funded. It enables effectuation of community-led projects responding to the needs of specific places. This approach leads to the integration of residents and deepening of interrelation between individual entities. CLLD is recognised as a particularly useful approach in the face of uncertainty, as it emphasises the possibility of involving the public in local development decision-making processes (Bumalová et al., 2016).
The implementation of CLLD results in the so-called 'soft' benefits, among which increasing social capital and undertaking cooperation with previously uninvolved residents (e.g. unemployed youth) are particularly emphasised. It encompasses a wide range of activities and is characterised by a high degree of flexibility in adapting to the problems being tackled. In the long time, it leads to increasing the role of self-governments and greater number of projects being undertaken throughout the European Union (Miller, 2014).

Cont. table 1.

<p>With the arrival of the new financial perspective (EU multinational financial framework 2021-2027), CLLD offers an opportunity to increase citizens' participation in the urban development process. The bottom-up nature of this tool means that it responds to the greatest needs of specific sectors. The works being undertaken simultaneously in different places create an integrated strategy presenting an innovative approach to solving local problems (Olszewski et al., 2021)</p>
<p>According to the Committee of the Regions, CLLD is 'a key instrument for the harmonious development of urban and rural areas, enhancing the capacity to develop relations with surrounding peri-urban and rural areas' CLLD's scope encompasses solutions put forward by residents who are struggling with local problems; participation of all stakeholders, from the local community to those in authority, and also the business community; an integrated approach that aims to solve the problems affecting the whole community rather than selected groups, such as problems concerning education. This instrument provides rapid results due to the direct involvement of people who have their local community's best interests at heart (Săracu, Trif, 2019).</p>

Apart from the legal regulations in force in a given Member State, it is generally recognised that the objective of integrated territorial instruments is to support local authorities involved in their territories development process and to promote diverse forms of cooperation between units. As stated in the Ministry of Development Funds and Regional Policy's study entitled, "Principles for the implementation of territorial instruments in Poland in the EU financial perspective 2021-2027" (Polish: *Zasady realizacji instrumentów terytorialnych w Polsce w perspektywie finansowej UE na lata 2021-2027*), these tools contribute to (Minister of Funds and Regional Policy, 2022):

- creating and strengthening links between units of specific functional areas and supporting their participation at different levels (from regional to international);
- improving the qualifications and skills of those involved in planning and implementing development strategies;
- facilitating the implementation of adopted solutions and seeking various sources of funding.

Particularly important in the implementation of sustainable urban development is the cooperation of regions, which, thanks to the efforts of the European Union, takes place through the European Urban Initiative. As shown later in this paper, the EUI platform supports cities in sharing ideas and worked out solutions.

## 2.2. European Urban Initiative as a support for EU cities cooperation

As noted previously, the introduction of integrated territorial development in the EU Member States implies the obligation to support cities in the area of their sustainable development, as specified under Cohesion Policy Objective 5, i.e., *A Europe closer to citizens*. It is worth mentioning that the minimum ERDF allocation for these purposes is at the level of 8%, assigned only to projects that are coherent with the objectives adopted under the Sustainable Urban Development Strategy. The process of supporting these entities is multidimensional, and in order to tackle specific problems and needs of cities, the European Commission has proposed the creation of the European Urban Initiative (EUI) funded by the ERDF. Its aim is to promote cooperation between and within cities, and to propose unified

solutions, thus eliminate major differences in the approaches or tools used by individual cities so as to achieve cohesion policy objectives. The success of this endeavour is based on synergy and cooperation between regions that takes place within the URBACT programme. Activities undertaken in the context of the EUI focus on supporting:

- innovative actions (IA),
- capacity building and knowledge building and works enabling an assessment of the impact on territorial development (The European Urban Initiative).

The main goal the EUI is to build a close relation between the indicated fields of activity, i.e., innovative actions, capacity building and knowledge building. In practice, this leads to the development of lasting principles of cooperation through the initiatives introduced in cities under the Cohesion Policy (About Innovative Actions).

### **Innovative actions**

From the point of view of the European Union which covers the most extensive area in terms of urbanisation, cities play a strategic role in the pursuit of sustainable development. They stimulate local and global economy, they are the hubs of innovation, centres science and culture and are facing numerous challenges, including environmental, infrastructural, social, technological, etc. Special attention should be paid to the fact that meeting these challenges requires the introduction of an innovative multilevel approach. However, in the practice of local government, this process is obstructed by many barriers, which most often relate to limited financial resources, authorities' unwillingness to accept innovative solutions characterised by a high level of risk, or due to their lack of experience in implementing such projects. It is worth noting that city authorities' reluctance to undertake bold initiatives spurred the European Commission to create a tool offering support for the implementation of innovative solutions in urban areas, i.e., EUI-IA (European Urban Initiative – Innovative Actions). As intended, the purpose of this instrument is to support cities across the EU in implementing previously well-tried innovative urban solutions. In addition, it is tasked with creating favourable conditions for taking the risks involved in turning unconventional ideas into pilot projects that can be put in place in today's cities. This tool enables an uninterrupted flow of information on successful innovations, so that the relative knowledge regularly reaches all the interested entities, where it can then be applied. The EUI-IA ultimately aims to accumulate extensive knowledge and build trust, which is a prerequisite for the dissemination of implemented projects. It is pointed out that any solution presented within the IA creates benefits for the EUI as a whole. In the longer time term, it is expected to strengthen the innovative potential of cities and increase their attractiveness, which, regardless of their geographical conditions, should comply with European standards. Importantly, all the relevant information is uploaded onto the urban knowledge platform – *Portico* - developed by the EUI to be used for capacity building and for knowledge building (About Innovative Actions).

## **Capacity building**

It leads to the enhancement of cities' capacities and the streamlining of their process of formulating policies, strategic plans and sustainable development solutions. It should take place in an integrated way and promote various forms of participation, including at local, regional and national level. Capacity building is based on cooperations of cities interconnected through URBACT IV networks. In addition, it promotes a peer learning approach and contributes to the capacity building of the Urban Development Network. The target audiences of the activities are mainly to city managers, politicians and other actors directly involved in the implementation of cohesion policy and in developing sustainable urban development. The individual activities fall into three main areas, namely:

- sharing knowledge and experience between cities,
- evaluation of implemented solutions,
- initiating projects enhancing cities' potential (Capacity-Building for Cities).

## **Knowledge building**

The activities in this area are directly related to the role of the EUI, which is to disseminate knowledge on sustainable urban development, collected in the form of know-how during the implementation of urban solutions. It is worth mentioning that works are currently underway on upgrading this platform, which in practice is intended to support sustainable urban development already at the stage of planning strategic objectives. Particular attention is given to issues:

- related to supporting the work on the Urban Agenda for the EU,
- concerning cooperation at governmental level to make the knowledge and skills developed so far available in an efficient way and thus improve the urban policy-making process (Knowledge for Cities).

It is intended that the involvement of individual entities at city, regional and national level will be supported by a network of contact points located in specific cities (Knowledge for Cities).

## **Portico**

It is described as “the gateway to urban learning” (*Portico - the Gateway to Urban Learning*) This platform has been created to collect and share knowledge with a view to promoting sustainable development in European Union cities. It provides access to up-to-date solutions and information on the actual results of projects implemented to achieve the objectives of cohesion policy, which includes building accessible, greener and more equitable cities. In addition, it integrates the whole Portico community, interconnects urban practitioners and provides tools to share their experiences. It is important to note that the resources gathered here (based on practical experience) constitute a starting point for shaping new policy, which can be propagated through the network of Urban Contact Points (UCPs) located in the Member States.



The EUI's initiative to create the aforementioned UCP network aims at integrating in one place as many participants as possible, including both urban policymakers and practitioners. Furthermore, it aims to increase their capacity to implement urban projects and to disseminate output and results at local, regional and national levels (Knowledge for Cities).

Based on the case study method, three initiatives selected from the innovative actions supported by European Union funding are presented further on.

### 3. Examples of innovative action projects – case study

The European Commission's decision to create the European Urban Initiative was aimed at supporting urban policymakers in developing innovative solutions to meet local challenges. It should be pointed out that the projects that received funding from the ERDR were subject to prior evaluation by a panel of experts, who assessed several hundred ideas submitted by cities in the calls for innovative actions. It is also worth noting that the proposed solutions had to fit into urban thematic areas identified by the European Union, with particular emphasis on their development potential and ease of implementation in other cities. Table 2 contains basic information on three selected projects from three different urban areas (out of a total of 16). These solutions were chosen randomly, while considering their duration (projects in progress or completed relatively recently) and the number of projects submitted within a given area (attention was paid to particularly developed areas). The table also indicates the amount of ERDF funding for the project and its partners.

**Table 2.**

*Characteristics of three examples of ERDF-funded innovative action projects*

City	Verona	Sofia	Vantaa
Subject matter	Demographic Change	Air Quality	Jobs and Skills in the Local Economy
Full name of the project	S.T.E.P.S Shared Time Enhances People Solidarity	INNOAIR Innovative demand responsive green public transportation for cleaner air in urban environment	Urban Growth -GSIP Vantaa - Growth and Social Investment Pacts for Local Companies in the City of Vantaa
ERDF funding for the project	EUR 4 million	EUR 3.7 million	EUR 4 million
Planned period of validity	01.07.2020-30.06.2023 (extended to 06.2024)	01.07.2020-30.06.2023	01.11.2018-31.07.2022
Partners	City of Verona 1 social housing agency 1 university 5 social cooperatives 1 local association	Sofia Municipality 2 universities 2 non-profit organizations 2 private companies 1 national public institution	Vantaa Municipality 2 universities 2 higher education research institutes 1 business network 4 private companies 1 public company

Source: (Projects; Sofia - Air Quality - INNOAIR; Vantaa - Jobs and Skills in the Local Economy Urban Growth - GSIP Vantaa; Verona - Demographic Change - S.T.E.P.S.)

The role of partners involved in the implementation of these innovative projects, listed in Table 2, was of key importance. It can be said that the partnerships were largely determined by the projects' subject matter. The project proposed by Verona responds to the challenges posed by demographic change and is geared towards the development of a social model, so that cooperation is mostly limited to social actors, without including private companies. In the case of Sofia, the project's partners were involved in different types of activity. Although the project responds to the needs of the community as a whole, the use of the know-how of private enterprises seems to be crucial in this respect, as, among other things, it requires the development of pertinent software for mobile devices. The third example – Vantaa – presents a very different nature of cooperation, i.e., strongly supported by private companies and oriented towards improving the skills of local community members. It should be noted that the diversity of actors in various partnerships is a result of the nature of the challenges faced by city authorities. In addition, such extensive cooperation leads to various suggestions on how to improve different aspects of current urban needs.

A more detailed description of projects featured in Table 2 is presented hereafter.

### **3.1. Verona - S.T.E.P.S Shared Time Enhances People Solidarity**

The circumstances that motivated Verona to develop and then implement the project under discussion stemmed from the numerous and successive changes in family structures, which were mainly related to gradual reduction in the number of medium-sized family members, and hence inevitable ageing of the population, resulting in larger proportion of people living alone. These changes are both demographic and social in nature. The results of the 2018 Verona survey showed a decrease of the average family size, and an increase in the number of single-member households, in addition to a high rate of elderly people and low fertility rates. These demographic changes obliged to examine the underestimated and complex consequences such as loneliness, which has no age and affects health, wellbeing and quality of life. The challenges to be met were therefore:

- to detect/qualify loneliness making it a measure of wellbeing/malaise;
- to improve individual/collective wellbeing;
- to prevent the erosion of the social fabric, through a set of interventions aiming at fighting loneliness conditions and its interrelated aspects of life (material conditions, quality of life and sustainability of living) (Verona - Demographic Change - S.T.E.P.S.).

The proposed project is about developing and implementing a social and territorial model. It is assumed that it will be adapted to demographic changes and is aimed at the prevention and treatment of loneliness, with the belief that a welcoming, inclusive, caring environment helps to prevent degenerative states of wellbeing/health. Starting from the analysis of the causes triggering loneliness, the project will define the dimensions of loneliness that will contribute to the Levels of Loneliness Index. (LoLix – Levels of Loneliness Index). Specific actions on the field will trigger the "loneliness management" with a specific focus on prevention and

treatment, reaching key aspects of life, namely material conditions, quality of life, sustainability of living. (S.T.E.P.S. Project). These actions will be structured through:

- the integration of physical spaces (whose function of meeting is to be restored) - the condominium complex, green areas, etc;
- relationships (between peers/neighbours, intergenerational, ...), digital space that facilitates the connection of physical spaces/relationships;
- digital space that facilitates the connection of physical spaces/relationships.

The main expected results are:

- creation of preconditions for new social interactions and social generations;
- reduced urban decay and reduced perception of degradation;
- a growth in the number of hours spent in relational contexts for recipients with an initial Lolix rating on the threshold of criticality;
- improved attractiveness of the territory and neighbourhoods made more family-friendly;
- improved living conditions of low-income families with equal resources;
- increased virtuous/sustainable behaviour, solidarity practices/non-monetised exchange (Verona - Demographic Change - S.T.E.P.S.).

The STEPS project should be seen as the City of Verona's reaction to challenges of a demographic nature, in response to which a solution aimed at fighting loneliness was implemented.

### **3.2. Sofia - INNOAIR - Innovative demand responsive green public transportation for cleaner air in urban environment**

The main motivation for implementing this project in Sofia was the growing problem of air pollution. Apart from the geographical conditions, among which the city's location on a plateau surrounded by high mountains is emphasised, special attention is also paid to human activities that further exacerbate the problem. We are talking here about an increase in the number of registered cars, which is compounded by the fact that Bulgarians own some of the oldest vehicles in the whole of Europe (Sofia - Air Quality - INNOAIR).

To address this problem, the municipality decided to implement measures aimed at reducing air pollution, including electrification of public transport. The primary objective of the project is to gradually replace the current urban transport by 'green on-demand public transport'. According to this concept, urban transport is provided by e-buses that do not follow pre-determined routes but create route map based on citizen demand submitted via mobile application. The app will leverage machine learning and advanced data analytics to create the most efficient path for each ride, collecting as much passengers as possible. This innovative public transport service will be implemented together with a wide array of initiatives: low emission zones, green corridors, downtown congestion charge. The integration of these measures makes it possible to permanently reduce air pollution in this city. At this point,

it is worth noting that the implementation of the INNOAIR project has already resulted in a wide-ranging transformation that, in addition to cleaner air, has introduced ground-breaking changes in the field of urban mobility (Electric Minibuses Offering On-Demand and Zero-Emission Public Transport Options to Citizens in Sofia; Sofia - Air Quality - INNOAIR).

Upon completion of INNOAIR the city will have a pool of coordinated policy tools, including:

- “On-demand green public transportation”, formed by a platform with machine learning and advanced analytic capabilities and mini electric busses;
- congestion charge model;
- low emission geospatial urban zones, preventing vehicles from entering the city centre and certain areas on polluted days;
- green corridors for active transport (INNOAIR Journal 2: Putting the Green Mobility Options on the Road)

It is expected that the project will contribute to significant behavioural change of the local population regarding public transport and broader use of public and active (walking, cycling) transportation. PM and CO<sub>2</sub> emissions will be reduced, which in turn will improve the health and wellbeing of residents.

### **3.3. Vantaa - Urban Growth-GSIP Vantaa - Growth and Social Investment Pacts for Local Companies in City of Vantaa**

Companies are currently facing the challenge of the dynamic changes that are taking place during the working lives of employees. It is recognised that in the future, only those companies will achieve a competitive advantage which point above all to a skilled and motivated personnel among their most important assets. It is worth noting that these companies invest in continuous learning at work and prepare for their future competence needs. By developing the competence of personnel, companies can meet the challenges arising from technological changes, as well as support the company's socially responsible growth. The Urban Growth Vantaa project developed solutions particularly for the challenges of working life that Vantaa faces. In Vantaa, companies are facing a challenge due to their low level of competence compared to other large cities in Finland. One third of the workforce is in the labour market without a post-comprehensive school education. At the same time, shifts in working life and technological development change the way we work. The majority of new jobs are in SMEs, but many SMEs find it challenging to support continuous learning (Urbaania Kasvua Vantaa; Vantaa - Jobs and Skills in the Local Economy Urban Growth - GSIP Vantaa).

Due to the complexity of the problem, cooperation between different sectors and systemic solutions were necessary. Thus, the joint work aimed at developing solutions for improving the competences of the workforce as well as increasing employment. Undoubtedly, by improving the competences of personnel in the field of automation and digital transformation, the implemented project has accelerated the development of companies active in the local

market. At the same time, it has increased the chances of the unemployed to find employment, and by offering upskilling opportunities protected low-educated employees from potential job loss. The innovative nature of the project concerned the development of an incentive model for companies. The solution introduced (GSIP - Growth and Social Investment Pact) responded to the needs expressed by local companies with about 40 employees, including those operating in the industrial sector (characterised by high employee turnover) and in the IT sector (requiring employees to keep up with technological advancements) (Cooperation and Collective Responsibility for a Socially Sustainable Future in Vantaa; Vantaa - Jobs and Skills in the Local Economy Urban Growth - GSIP Vantaa).

The activities began with the development and subsequent implementation of three GSIPs (thematically different) in five specific companies. After a test phase, they were initiated in 60 entities. The result of the works undertaken as part of this project was the joint development of three sets of Growth Deal services, oriented towards supporting the growth of companies and the spread of social responsibility in their activities. This included:

- Growth Deal 1 offered companies services supporting recruitment, as well as training and coaching services supporting growth.
- Growth Deal 2 supported companies in competence development. The service package consisted of company specific group coaching and professional skill development services.
- Growth Deal 3's services supported companies in promoting technological change projects and the development of competence management methods. (The GSIP Project Journal 4: How Has an Innovative Idea Enriched the Local Jobs and Skills Discourse; Vantaa - Jobs and Skills in the Local Economy Urban Growth - GSIP Vantaa).

Defining the afforested sets of service was made possible by using agile testing methods. In Initially, these services were implemented in partner companies, where it was then decided to develop them further and implement as pilot projects in SMEs. These services included:

- development of professional competences by conducting information meetings on improving professional competences. The topics of the sessions responded to the specific needs of employees and managers. An additional advantage was the expert's assistance in tailoring an appropriate training programme, enriched by individual discussion panels and advice;
- training sessions, which consisted of thematic meetings conducted in e-learning and on-site. Training subjects included: communication, lean concepts, human resources management, use of Office package, etc.;
- growth coaching. Group coaching tailored to its needs. By enhancing the competence of the whole team, it has contributed to the development of a learning culture;

- technological development services - a key role was played here by external companies, which carried out an assessment regarding the possibility of introducing a new technology to improve competitiveness. This service was about recognising development needs and proposing appropriate solutions;
- coaching competencies for development. This service improved personnel's competencies, among others through the involvement of coaches in the development of new upskilling methods and continuous learning process. The process of assessing/recognising existing competences was also supported;
- recruitment services for SMEs, which covered four main areas, namely: Employee search. Companies received help for finding employees via employment services and networks. Services were also offered related to other areas, such as interviewing; Information and guidance: Companies were provided with information about financial assistance for recruiting, such as pay subsidy, and related services; Recruiting through apprenticeships: Companies were helped with mapping out suitable tasks and students for apprenticeships. Vocational College Varia was responsible for the courses; Reorganising and reformulating needs: Companies received help for clarifying and formulating what kind of skills they need (Urbaania Kasvua Vantaa; Vantaa - Jobs and Skills in the Local Economy Urban Growth - GSIP Vantaa).

In the process of upskilling personnel, there were also used digital tools such as: Personal Digital Coach (supporting the learning process of employees); Competence Mapping Portal (support for the company's internal career paths); Dashboard (support for the city's business cooperation), UKV bot (support for charting company needs) (Vantaa - Jobs and Skills in the Local Economy Urban Growth - GSIP Vantaa).

It should be noted that such an extensive range of products and services provided for of the presented projects is due to the nature of the cooperation undertaken to achieve the desired results. Both the number of partners and the specifics of their activities may affect the number and quality of the solutions resulting from various methods and approaches. There is no doubt that cooperation offers far more development opportunities than individual activity.

#### **4. Summary**

It is worth noting that the implementation of territorial instruments increases the scope of their impact on the projects undertaken in the cities and their associated functional areas. These are mainly projects following the principles of cohesion policy promoting an integrated approach to development, which implies collaborative problem-solving and aims at the uniform provision of public services to the local community.

The emphasis on the promotion of sustainable development in urban areas, carried out in accordance with the regulations of the cohesion policy, is a consequence of the gradually strengthening view that EU cities authorities are obliged to formulate and implement development strategies in response to the challenges of the local environment. It is pointed out that the specificity and scope of the necessary works in urban areas force public authorities to introduce solutions that do not follow traditional methods but are of an innovative nature. The challenges currently faced by local authorities necessitate the implementation of innovative solutions, based on close cooperation.

A key role in supporting the process of promoting sustainable development in urban areas should be attributed to the European Union, which recommends that it be carried out in accordance with an integrated approach. Taking into account the possibilities resulting from the cohesion policy, it should be pointed out that cities have territorial instruments at their disposal to facilitate and improve the implementation of sustainable development projects. Undoubtedly, the European Union is striving to ameliorate this process, and by using many different ways to reduce the disparities between the cities of the Member States. It is worth mentioning here some of the initiatives undertaken in this direction, such as: the creation of the European Urban Initiative platform, which collects and makes available information on solutions implemented in the field of sustainable urban development. Importantly, the solutions to be shared must have a high development potential and be easy for other cities to apply. A necessary prerequisite for their implementation is cooperation between the city and other entities (universities, businesses, etc.). Partnership provides a range of different opinions and approaches to the problem under consideration and thus leads to a better understanding of the issue to be tackled and the identification of a broad range of relevant activities.

The main limitation of this study is that the information on many completed projects (previously selected by the EUI) has not yet been updated on the innovative actions website. Hence, the lack of data on the final products that were developed during project implementation, the constraints associated with the process of implementing solutions and on the possibilities of applying these solutions in other EU cities.

This study is of a qualitative nature, the main aim of which was to identify the role of cooperation in disseminating the principles of sustainable development, presenting three examples of selected EU cities where innovative solutions have been implemented. It is presumed that subsequent articles will include quantitative research and will be directed towards assessing the interrelations between the use of territorial instruments, the implementation of local development strategies and the well-being levels of local communities.

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