

Sustainable Development Goals

Handbook for signatories
of the Action Plan for Cities

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INTRODUCTION

Hereby, we present the handbook “Sustainable Development Goals” – a systematic source of guidelines for the signatories of the “Action Plan for Cities”. The mission of the Program, the effect of which is the “Action Plan for Cities”, is to popularise and implement sustainable trends in contemporary urban thought. The plan is developed together with city authorities and is intended to be the legacy of WUF11 and a contribution to the update of the National Urban Policy, as well as an important reference for next year’s UN Habitat - World Cities Report, the most important international document supporting sustainable urbanization. Moreover, the Program remains coherent to the Strategy for Responsible Development, which is the implementation of global sustainable development goals in Polish urban policy.

The Action Plan for Cities, a project initiated by the Ministry of Funds and Regional Policy, and enacted by the WUF Strategic Partner, i.e. the Institute of Urban and Regional Development, is the Polish response to the challenges related to the implementation of the sustainable development goals set by the 2030 Agenda. The program is an integral part of the World Urban Forum, during which it will be announced and signed. The Forum is a prestigious, international conference organised by the UN-Habitat in order to exchange experiences and knowledge in the field of urban and human settlement development. It is the most important global event for politics, transformation and urban development, taking place for the first time in Eastern Europe. The mission of the Action Plan for Cities is to leave the heritage of WUF11 in the form of a catalogue of activities, a common vision of sustainable development developed through the exchange of experiences, transformations to date and the long-term aspirations of city dwellers. The program aims to include Polish cities in the global discussion on the development of urban areas and to create space for the systematic implementation and improvement of good practices in local urban policies.

Assuming the promotion of localities, the Action Plan for Cities aims to select and promote the already undertaken actions of Polish cities in the enactment of sustainable development goals. The invitation to participate in

the Program was addressed to all cities in Poland, regardless of their size. The eligibility criteria were local achievements in meeting the goals of sustainable development, which are a response to local challenges. Thanks to expert advice, the Program aims to strengthen the pro-development impact of already developed solutions in participating cities and to promote them among other cities facing similar challenges in Poland, in Europe and in the world. The Action Plan for Cities aims at presenting the Polish contribution to the implementation of global sustainable development goals, which may become an inspiration for other cities in the world. It will also be an opportunity to strengthen the local team working on the city's development strategy thanks to external expert support, as well as to strengthen cooperation with the local expert community through the obligatory inclusion of its representative to work on a project implemented in the city under the Program.

This handbook for signatories is a catalogue of solutions that can enrich the activities already carried out in the city under each of the Sustainable Development Goals. From among the directions of development, the ones most appropriate to Polish conditions were selected and compiled for each of the objectives. Additionally, in each of the goals it was specified to which target groups are dedicated the proposed solutions. The main areas of activities made it possible to organise them so that the search for specific solutions was more convenient. For most of the Sustainable Development Goals, descriptions of good practices from Poland and abroad and links to additional materials are provided.

We invite you to read and apply the action kits listed in this handbook.



GOAL 1 - NO POVERTY

Actions under Goal 1 will focus on counteracting extreme poverty, which is accompanied by the lack of a home or the risk of losing it. A house is a place where the inhabitant has a “roof over his head”, that is, a shelter from cold, heat, rain and other unfavourable weather conditions. In addition, the resident has a legal title to it, e.g. a lease, sublet agreement, ownership, which he can enforce and in which he can build satisfactory social relationships, i.e. he has privacy and the ability to decide about his life. People whose current housing situation does not meet these criteria experience or are directly at risk of becoming homeless. This is usually accompanied by income poverty. For a description of housing situations that represent homelessness or an imminent threat of homelessness, see the ETHOS Typology of Homelessness and Housing Exclusion by FEANTSA, the European Federation of National Organisations Working for People Experiencing Homelessness.

DEVELOPMENT DIRECTIONS

- **Ending homelessness in the city based on the “Housing First” model** (the principles of the model are the availability of housing as the basis for starting work on ending homelessness, self-determination of support recipients about the type and time of using support, appreciating each step towards full health, providing individualised adequate support to the needs of the person, embedding in the environment and implementing general access services).
- **From relationship-based street work to the full “Flat First” program** (ways of transforming “information” street work (Pomeranian standard) into relational street work and accompanying the person from street to apartment on a permanent basis).
- **Addiction treatment** (improving the availability of addiction treatment centres, providing low threshold facilities for people experiencing homelessness, using addiction treatment methods that are alternatives to abstinence, e.g. drinking and harm reduction programs, psychological and psychiatric support for people struggling with addiction).
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- **De-institutionalization of services for people experiencing homelessness** (transforming collective facilities into complexes of apartments, training / supported / protected apartments, increasing access to services in the environment, providing mobile specialist support teams).
- **Improving the financial situation of residents by learning how to manage money well** (counselling on available financial benefits, learning how to manage money).
- **Implementation of services improving the functioning in the apartment as part of the prevention of extreme poverty and homelessness** (providing support to people with difficulties in paying rent regularly or who disturb the neighbourhood order, or do not respect the lease terms in any other way, through psychological assistance, counselling and implementation of general access services).
- **Increasing the observance of the rights of the extremely poor people experiencing homelessness and housing exclusion** (implementation of the Charter of the Rights of People Experiencing Homelessness in cooperation with the commune self-government and non-governmental organisations).
- **Increasing the housing stock available to poor residents** (providing forms of renting city premises to non-governmental organisations conducting housing support programs for residents, providing forms of acquiring private premises to achieve social goals, including social rental agencies).
- **Implementation of social campaigns** (information portals, social media, media), **conferences** (live, online, with external experts and practitioners) **and training** (creating programs, recruiting participants, online / live, basic, in-depth, experience presentations, work “on the case”).
- **Building policies** against poverty and housing exclusion **based on evidence** (identification, aggregation, analysis and elaboration of local data, providing recommendations for increasing the efficiency of the data collection process, quantitative and qualitative research, efficiency studies, evaluating program fidelity under the banner “Housing First”).
- **Planning, implementation and evaluation of a comprehensive approach to homelessness and housing exclusion** (based on a broad approach to homelessness, i.e. the European Typology of Homelessness and Housing Exclusion ETHOS).
- **Learning and adapting models from other local communities, including foreign ones** (choosing a model, practices, services, establishing contacts with stakeholders, exchanging experiences, independent or joint implementation, adaptations, analysis of effects, building a network of domestic and foreign cooperation).

PRIORITY TARGET GROUPS

- Extremely poor people
- People experiencing long-term homelessness
- People experiencing homelessness and mental health crises
- People with substance and behavioural addictions
- Unmotivated people refusing to use the existing support system
- Social workers, assistants of state social welfare and non-governmental organisations
- Employees of non-governmental organisations and other institutions running facilities and programs for people experiencing homelessness
- Healthcare professionals, including in particular the mental health and community psychiatry sectors
- Employees managing public housing resources
- Local government decision-makers creating local policy in the area of poverty, social exclusion and housing
- Local advocates and researchers on the phenomena of poverty, homelessness and housing exclusion
- Volunteers and vulnerable residents who are socially involved in the life of the local community

MAIN AREAS OF ACTIVITY

- END OF EXTREME POVERTY AND HOMELESSNESS OF INHABITANTS THROUGH SOCIAL SUPPORT (so called „soft“, non-investment).
- DEINSTITUTION OF SUPPORT - DEVELOPMENT OF SERVICES IN THE LOCAL ENVIRONMENT
- PLANNING OF LOCAL EVIDENCE-BASED POLICIES

RECOMMENDED ACTIONS

Main areas of activity	Actions
<p>END OF EXTREME POVERTY AND HOMELESS OF INHABITANTS THROUGH SOCIAL SUPPORT</p>	<ul style="list-style-type: none"> • Increasing the participation of support recipients in planning, managing and assessing the quality of services and policies (training and employing experts through experience, involving residents of institutions in deciding on their functioning, obtaining opinions through research in which respondents are people experiencing the problem); • Relationship-based streetworking; • Create and maintain a social kitchen; • Creating and maintaining low-threshold intervention places for short-term stay, e.g. heating rooms, community centres, mobile counselling points, clubs; • Specialist teams “First home” – intensive management of the IZP case, assertive environmental support of the AWS with the use of in-depth social work teams, community treatment teams, specialist care services; • Mobile psychological support for people with difficulties in living in an apartment: people who, after a period of homelessness, end up in municipal apartments, people at risk of eviction; • Assistantships / support by general access services; • Specialist counselling and learning to use available financial, material and service support; • Building a Psychologically Informed Environment in traditional shelters, shelters with care services, maternity homes, etc. • Inclusion in supporting activities: social skills training, motivating dialogue, solution focused therapy, harm reduction in addiction treatment, budget training.
<p>DEINSTITUTION OF SUPPORT - DEVELOPMENT OF SERVICES IN THE LOCAL ENVIRONMENT</p>	<ul style="list-style-type: none"> • Supported, training and sheltered housing programs; • Full “Housing First” programs – dispersed and in a shared building with the use of EU funds;

	<ul style="list-style-type: none"> • Converting traditional shelters, e.g. single mother homes into supported housing programs; • Social rental agencies, e.g. the use of private housing resources for social purposes; • Providing municipal / communal premises to non-governmental organisations for the implementation of housing programs; • Training for employees of traditional institutions at work using the environmental method (in a natural place where people stay with the use of general access institutions), self-determination of support recipients, attitude towards recovery, and harm reduction;
<p>PLANNING OF LOCAL EVIDENCE-BASED POLICIES</p>	<ul style="list-style-type: none"> • Using the ETHOS European Typology of Homelessness and Housing Exclusion as a framework for planning a local support system that responds to all difficult and extremely difficult housing situations; • Using ETHOS as an alternative definition of homelessness to the definition of “homeless person” currently existing in the Act on social assistance; • Analysis and aggregation of data in, for example, social welfare, local housing resource management institutions, organisations providing support in terms of obtaining a full picture of the scale and nature of the phenomenon, recommendations; • Planning and conducting homelessness research “in point in time”; • Research on the effectiveness of support programs taking into account indicators of change in the situation of support recipients (not only indicators of the scale and type of aid provided); • Implementation of the Charter of the Rights of People Experiencing Homelessness in cooperation with the local government and non-governmental organisations, modelled on the actions of cities that have already done it (Gdańsk) or started (the Capital City of Warsaw); • Learning and adapting models from other local communities, including foreign (choice of practice, services through publication analysis, conferences, webinars, establishing contact and exchange of experiences, adaptation, implementation, analysis of effects, building a network of domestic and foreign cooperation).

Good practices from Polish cities participating in the “Action Plan for Cities”

Częstochowa

When initially planning the city’s strategy in the horizon of 2030, significant challenges in the social sphere were identified in Częstochowa. Despite the falling unemployment level, the large number of the unemployed using social assistance remains constant, and the percentage of people using social benefits has also remained high for years. Housing challenges are no less important. The demand for municipal housing is incomparably greater than the amount of available municipal resources, and the problem of rent debt is one of the more serious challenges for the housing resource manager.

The mission of Zakład Gospodarki Mieszkaniowej TBS sp. z o.o. in Częstochowa is to provide an effective, comprehensive and responsible approach to managing the municipal property of the City of Częstochowa. These are activities aimed at satisfying the current and future housing needs of tenants, owners of premises, as well as the local community. The company plans to systematically increase its housing resources, while striving to improve the quality of life of the local community by combating housing poverty and social exclusion, and increasing the level of safety of the residents of the Company’s resources. Activities of the City Hall of Częstochowa and Zakład Gospodarki Mieszkaniowej TBS in Częstochowa sp. z o.o. in cooperation with the Częstochowa University of Technology, Faculty of Management, the Municipal Police Headquarters in Częstochowa, the Municipal Social Welfare Centre, the Adullam Foundation, and the Foundation for Development, help to gradually meet the challenges by improving the management of housing services.

In order to assist people who have difficulties paying rents in municipal resources, Zakład Gospodarki Mieszkaniowej TBS in Częstochowa, under the patronage of the mayor of the city, implemented several practical solutions. These are debt relief programs:

- 1) Soft Debt Collection Program - “Work for rent”;
- 2) the “Reliable tenant” competition;
- 3) the assumptions of the ordinance No. 2008.2017 of the Mayor of Częstochowa of 8 September 2017 on facilitating the repayment of debt arising from the use of residential premises included in the housing resource of the commune to persons in difficult financial situations. The aforementioned programs made it possible to reduce the indebtedness of 123 tenants to the amount of over PLN 1.5 million. The persons registered in the indebted

premises have the right to compensate the rent they pay, and the benefit in kind may be provided on the basis of an agreement. The “Reliable tenant” competition was started to promote the systematic payment of rent, which significantly translated into an increase in the number of people who are not in arrears with payments. An average of 70 people take part in the final of the competition each year.

An electronic apartment exchange search engine was also established. The tool is available on the website of ZGM TBS. The task of the search engine is to support the exchange of indebted flats and to adjust the maintenance costs of the premises to the property possibilities of the tenants. The search engine allows individuals to exit the spiral of debt through a one-off debt relief, combined with a change of premises. In the period from 01/01/2017 to 01/12/2021, there were 25 770 users and as many as 433 943 page views.

Housing poverty is accompanied by exposure to many other problems, mainly violence and extortion. The programs “Be safe for a senior”, “Action Safe Częstochowa”, “Abecadło of Senior Security” or “Stop Cyber Violence” were aimed at avoiding crime based on teleinformatic channels, for example, the so-called granddaughter, fake policemen, etc., and included the prevention and counteracting of online violence. The campaign “Together against violence” was particularly important socially. The action was launched with people experiencing domestic violence. Its aim is to increase the effectiveness of the prevention of domestic violence by including local government entities with other main activities, e.g. municipal premises managers, by creating algorithms for dealing with this phenomenon.

Jarocin

Jarocin

In Jarocin, the commune authorities have regarded the provision of housing as one of their main development goals. The construction of new apartments contributes to the improvement of the quality of life of Jarocin’s inhabitants and the influx of new inhabitants. This translates into the development of the entire city and the enhancement of the commune’s demographic situation. A wide offer of city flats and more favourable than in the case of the commercial market access conditions make it possible to meet one of the basic human needs, which is a place to live and achieve life goals. Greater availability

of city flats for a wider group of recipients increases the chances of housing for less wealthy people who are not able to improve their housing situation through the commercial market. The development of housing construction has a real impact on creating favourable conditions for the local community and gives all residents equal opportunities for personal development.

The commune company Jarocińskie Towarzystwo Budownictwa Społecznego (JTBS) (Jarocin Society of Social Housing), existing since 1999, is of strategic importance for the implementation of the End with Poverty goal. The company, which is 100% a municipal company, has a very wide offer of flats of various status. These include ownership, tenant, rental and social housing. JTBS currently manages 44 housing communities and is the owner of 76 buildings that have been handed over to the company by the Jarocin Commune, as well as 13 buildings with social housing. In the years 1999-2020, JTBS built a total of 269 apartments in various locations in the commune. The company



Photo 1. Social housing in Hilarów. Source: City Hall in Jarocin

also administers social flats on behalf of the commune, 64 of which were built in 2007-2018.

Another type of communal flat found in Jarocin is the supported flat that is connected with other flats via common utility rooms, computer rooms, rehabilitation rooms, social facilities, classrooms and laundry rooms. These apartments are managed by the Social Services Centre (and formerly by the Municipal and Communal Social Welfare Centre). They provide an alternative to a social welfare home for people who need support in self-management during the day rather than 24-hour care, and reduce the cost of providing support to people with such needs.



Photo 2. Supported housing, Jarocin, Zaciszna 6. Source: City Hall in Jarocin

Another undertaking in line with the 1 SDG was the construction of rental apartments in the so-called “turnkey” system under the government program “Mieszkanie Plus”, in cooperation with the local government and the National Economic Bank (Polish: Bank Gospodarstwa Krajowego – BGK). It is worth noting that Jarocin was the first local government in the country to take part in the “Mieszkanie Plus” program, and JTBS was the first municipal company that started construction works under this program (in December 2016). At that time, the construction of 366 apartments in three different locations within the commune began. The rental housing financing program was implemented jointly with BGK TFI, then BGK Real Estate, and now PFR Real Estate.

Apartments realised by JTBS are turnkey finished and cannot be bought. Their tenants, unlike the situation on the private market, have adequate legal means to protect them against rent increases. Based on the survey research and the submitted applications for housing, it can be concluded that these investments fit well with the housing needs of Jarocin residents.

Currently, the Jarocin Society of Social Housing continues the construction of rental apartments in the commune. In October 2020, the construction of 78 units began in Potarzyca, which will be put into use in the fourth quarter of 2022. In the following years, the construction of further rental apartments is planned in Witaszyce and Mieszków.

The city of Jarocin primarily uses its own resources for development, which it tries to combine with external programs from which funds can be obtained for the implementation of infrastructural and social tasks, there-

fore, the opportunities to participate in many programs at the voivodeship, national and international level are used to the maximum. In order to prepare applications for external funds, among others, the commune company, the Jarocin Development Agency and the Strategic Planning Department of the Municipal Office in Jarocin actively cooperate. Employees of such institutions work closely with representatives of all sectors of the city economy, as well as enactors of culture, education and social policy in order to prepare plans and specific projects aimed at the development of the city and the entire commune.

In the case of housing investments, the existing infrastructure is used in its entirety, and is constantly modernised, and the policy of building new apartments on communal land is developed with the use of external funds, e.g. from the “Mieszkanie Plus” program, the Polish Deal program, or favourable subsidies or loans from the National Economic Bank. Also in order to better coordinate this activity of the commune, the company “Jarocin Society of Social Housing” was established.

New housing investments are located throughout the commune, not only in the city of Jarocin. This favours the sustainable development of the commune, and not only the area’s urban areas. Primarily, communal land is used in order to reduce investment costs as much as possible. Within the new apartments, an entire social and health infrastructure is being built simultaneously, e.g. roads, schools, kindergartens, shops, pharmacies, etc., so that the residents connect their future more closely with the commune.

Links to detailed studies on the example activities mentioned above:

ETHOS European Typology of Homelessness and Housing: Exclusion:https://www.feantsa.org/download/pl_7386404743356865659.pdf

Increasing the participation of recipients of support for homelessness:

<https://www.feantsa.org/download/poradnik-partycypacji-pl-fi-nal-20137903165101250913409.pdf>

Specialist teams “Housing First” and full Programs Housing First:

<https://najpierwmieszkanie.org.pl/publikacje/strona/model-wstepny-FNM-P-spis-tresci/>

Mobile psychological support for people with difficulties in living in an apartment:

<https://najpierwmieszkanie.org.pl/publikacje/aktualnosc/ambiwalencja/>

Implementation of the Charter of the Rights of People Experiencing Homelessness in cooperation with the local government and non-governmental organisations:

<https://wsparcie.um.warszawa.pl/warszawska-karta-praw-osob-doswiadczajacych-bezdomnosci>

Learning and adapting models from other local communities, including foreign - an exemplary description of practices from foreign communities - to be used, adapted locally:

https://www.czynajpierwmieszkanie.pl/content/uploads/2015/06/zapis-z-Chicago_Wygnanska.pdf

https://www.czynajpierwmieszkanie.pl/content/uploads/2015/06/zapis-z-Chicago_Wygnanska.pdf



GOAL 2 ZERO HUNGER

DEVELOPMENT DIRECTIONS

- **Improving the food situation of residents** (ensuring residents have access to safe, nutritious and balanced food);
- **Providing fairer and equal access to food, ensuring food security and combating inequalities in this area** (e.g. initiating programs to support food groups at risk of malnutrition by providing free / subsidised meals for children in schools, also during the summer holidays);
- **Countering hunger and malnutrition – with focused upon groups at risk** (children from poor families, the homeless, low-income families, large families and the unemployed);
- **Promotion and prophylaxis of healthy eating aimed primarily at children, adolescents and their families, and counteracting bad eating habits;**
- **Counteracting and treating causal diseases (e.g. obesity) and secondary diseases, timely diagnosis and treatment of diseases,** providing comprehensive preventive assistance and therapeutic assistance;
- **Counteracting food waste** (e.g. food banks, information campaigns, food collection);
- **Building a common model of healthy life based on good eating habits –** creating conditions for healthy growing up and living;
- **Integrating information campaigns on healthy eating and hygiene** with other dissemination activities;
- **Improving the supply of the municipal food market via locally available and healthy food.**

PRIORITY TARGET GROUPS

- Children, especially under the age of five
- Young people, especially adolescent girls
- Pregnant women and nursing women
- Nursing women
- Elder people
- Homeless, indigent, unemployed, people in a difficult life situation
- Local food producers and their customers
- Volunteers
- Charities and the NGO sector
- Social activists

- Doctors, nutritionists, nutrition experts
- Biotechnologists, biologists, chemical analysts
- Self-help groups
- School management and management
- Teachers and educators
- Local government employees

MAIN AREAS OF ACTIVITY

- COUNTERING MALNUTRITION, HUNGER AND OVERWEIGHT SITUATIONS
- PROVIDING SUSTAINABLE AND SAFE FOOD
- PROMOTING A HEALTHY LIFESTYLE
- DEVELOPING THE LOCAL ORGANIC FARMING INDUSTRY

RECOMMENDED ACTIONS

Main areas of activity	Actions
<p>COUNTERING MALNUTRITION, HUNGER AND OVERWEIGHT SITUATIONS</p>	<ul style="list-style-type: none"> • Establishing dietary counselling centres for overweight children and adolescents with eating disorders, as well as for their parents; • Supporting charity activities - providing hot meals to malnourished children in the city; • Providing assistance in financing meals for children and young people from families and households in difficult financial situations; • Creating a system of environmental support for nutrition, focused primarily on vulnerable social groups, pregnant women, breastfeeding mothers, adolescents, children and the elderly;
<p>PROVIDING SUSTAINABLE AND SAFE FOOD</p>	<ul style="list-style-type: none"> • Conducting sustainable planning policies and urban planning, including the use of the provisions of local spatial development plans for the protection of urban arable lands, allotment gardens, neighbourhood gardens, fairs and bazaars, flower and recreational gardens etc.;

	<ul style="list-style-type: none"> • Raising awareness about breastfeeding, using information channels to promote, disseminate and spread knowledge about the healthiest infant nutrition practice;
<p>PROMOTING A HEALTHY LIFESTYLE</p>	<ul style="list-style-type: none"> • Promoting a healthy lifestyle in nurseries, kindergartens, schools (popularising and educational activities); • Conducting free / co-financed sports activities for all residents; • Initiating thematic information and advertising campaigns aimed at increasing the level of knowledge about healthy food, taking into account environmental requirements; • Ensuring that healthy food products such as milk, vegetables and fruit are delivered to local schools (grown or produced by local producers);
<p>ROZWÓJ ROLNICTWA EKOLOGICZNEGO</p>	<ul style="list-style-type: none"> • Ensuring the operation of organic food fairs offering fresh, local and regional products at numerous, at least weekly, fairs; • Ensuring the presence of organic food stores that will make a significant contribution to the food supply of residents; • Promoting organic farming, increasing trade in agricultural products, organising agricultural events and making residents aware of problems and threats related to local agriculture; • Encouraging the support of urban and ecological farming activities; • Disseminating marketing brochures promoting: direct sellers of agricultural products, a schedule of all weekly agri-food markets in the city, information about agriculture and horticulture, as well as helpful explanations about agricultural products;

- **Undertaking projects aimed at reducing the amount of nitrogen dioxide in the environment** and counteracting the phenomenon of surface runoff (consisting of groundwater, surface water and air pollution) flowing from agricultural land to water sources and urbanised areas and vice versa.

1. Extending the definition of hunger

In thinking about solving the problem of hunger, we must broaden its definition. In encyclopaedic terms, hunger is defined as “a state of the body related to the deficiency or lack of food, but also: a feeling of hunger caused by lack of food” (after PWN). In Poland, we are not dealing with the problem of quantitative hunger, i.e. insufficient amount of calories consumed, less and less frequently. The problem is quality hunger, i.e. insufficient content of nutrients in food. The lack of appropriate ingredients, although it does not cause the physiological feeling of hunger, leads to disturbances in the functioning of the body. We are talking then about malnutrition. It affects both the way of development, e.g. in children, and the way of social functioning.

The problem of hunger is closely related to the other Sustainable Development Goals. The main ones are: ending poverty, ensuring good health and quality of life, and ensuring responsible consumption and production. Solving hunger is not just a matter of feeding the needy. It is necessary to create such organisational conditions that everyone can satisfy their fundamental right - the right to quality food.

Important!

A radical transformation of our agri-food systems is needed, as stated in a joint statement by the EU, FAO, WFP and USAID. “If current trends are not reversed, food crises will become more severe and severe. The coronavirus pandemic has exposed the weakness of the global food system and the need for fairer, sustainable and resilient systems,” the organisations said in a joint statement.

2. Data on starvation

When discussing the problem of hunger in Poland, we do not have available data from research only on this phenomenon. We also have access to statistical studies on the expenses and financial situation of Poles and the scale of poverty in our country. On this basis, we can draw comprehensive conclusions regarding hunger in Poland.

The Food and Agriculture Organisation of the United Nations (FAO), in collaboration with the International Agricultural Development Fund (IFAD), the United Nations Children's Fund (UNICEF), the World Food Program (WFP) and the World Health Organisation (WHO), are publishing a report entitled *The State of Food Security and Nutrition in the World*. According to data from a report made public in 2021, more than half of the hungry people come from Asia (418 million), and more than 1/3 from Africa (282 million). In European countries, and thus also in Poland, the percentage of people exposed to malnutrition was less than 2.5%. Indeed, the percentage of people suffering from malnutrition in Poland has fallen below 0.5%. (1.3% for Europe), which is one of the best results on the continent. However, according to the above-mentioned report in Poland, the percentage of overweight adults has increased: from 21.5% to up to 23.1 percent. The report also recommends helping those most vulnerable to economic hardship, for example, through in-kind or monetary support programs to reduce the impact of a pandemic or changes in food prices.

Apart from extreme situations, i.e. people dependent on the help of others and people who are unable to provide themselves with food (e.g. chronically ill people), the problem of hunger is closely related to poverty. EAPN (European Anti-Poverty Network) Poland publishes a report on poverty in Poland. It shows that in 2020, the extent of extreme poverty in Poland has increased to 5.2%. This means that the population of Poles living below the subsistence level now totals about 2 million people, including 410,000 children and 312,000 seniors. The extremely poor cannot afford to provide themselves with basic life items, including food. We can estimate that about 2 million people in Poland need food support.

3. The impact of hunger on other spheres of life

3a. The social aspect

Those in need, who cannot provide themselves with basic food items, depend on the help of other people or entities (offices or organisations).

This dependence concerns the amount, type and quality of the aid received. Clients lose subjectivity and the ability to make their own choices. Seeking help can be an extremely difficult decision for some who are in need. Some are not able to do this. Rather, they decide to save on food or simply give up on eating. People on food support can also experience stigma, shame and exclusion.

3b. Health aspect

The problem of hunger and malnutrition is closely related to the topic of health. In addition to the known consequences of food shortage, the problem of too much consumption of food, especially highly processed food, is also visible. Advertising has a great influence on bad eating habits. The marketing message is perceived on a par with the medical or dietary opinion. The National Institute of Public Health of the National Institute of Hygiene - National Research Institute in the published research on the diet of various groups of the population in Poland indicates that the diet often deviates from the recommendations of nutritionists. This situation increases the risk of overweight and obesity and other chronic diseases. This is evidenced by the increasing incidence of increased body weight, among children, adolescents and adults. Although obesity appears to be the opposite of hunger, it can be the result of a lack of funds for wholesome food and, therefore, the consumption of highly processed low-value food. People who are impoverished often do not eat the appropriate catalogue of products and do not provide their bodies with the ingredients necessary for proper functioning.

4. Provision of food in Poland

Providing a meal to people who are deprived of it is a compulsory task of the commune's own. The aid is, however, granted on an ad hoc or periodic basis – and is just one hot meal a day. It is given over to people, who, by their own efforts, cannot ensure it. Individuals or families may also receive assistance in kind, in the form of food products. It is extremely important to help children and adolescents while studying at school in the form of hot meals, and the body running the facility may exempt parents or adult students from part or all of the fees for meals in the event of a particularly difficult financial situation within the family. School meals are often the only hot and full meals that the poorest children consume during their entire day. It is also very important to

take care of these students on their days off from school: during winter breaks, summer vacations or Christmas breaks. If the family does not benefit from the systematic support of organisations and entities, children may not get enough nutritious food.

Important!

Not everyone is aware that in Poland during Christmas, when most Poles prepare their traditional multi-course dinner, there are families that celebrate only with bread crusts.

5. System solutions

5a. Feeding programs

The Operational Program Food Aid 2014-2020 (PO PZ) is co-financed by the Fund for European Aid to the Most Deprived - FEAD. The program was developed in accordance with Regulation (EU) No 223/2014 of the European Parliament and of the Council of 11 March 2014 on the European Fund to Aid the Most Deprived. People in need receive the following items: vegetable and fruit, starch and dairy items, meat, as well as sugar and oil. Customers can also take advantage of free training or workshops on, inter alia, food preparation, dietetics and healthy eating, efficient management of the household budget, as well as prevention of food waste in order to increase independence and social inclusion. The program is administered by the Federation of Polish Food Banks, Caritas, PKPS, PKPS and the Old Catholic Church in Poland.

<https://www.gov.pl/web/rodzina/program-operacyjny-pomoc-zywnoscio-wa-2014-2020>

In the upcoming years, the feeding program will be continued under the banner of the European Food Aid Funds 2021-2027.

5b. The act on counteracting food waste

The act on counteracting food waste as legal initiative, aims at defining food handling rules in order to reduce food waste and to prevent the negative social, environmental and economic effects resulting from food waste. It is

aimed at sellers so that, instead of throwing away food they have not sold, they can donate it to social organisations that help those in need. In practice, it has become a great help for organisations that support their charges with these articles. Previously, this food was disposed of in the trash.

6. Examples of organisations and initiatives providing food aid in Poland

6a. Organisations

Food aid is provided by many organisations and entities. Several of the organisations specialise in providing food aid and this is one of their main objectives. There are 32 Food Banks in Poland, the primary goal of which is to prevent food waste and help the poor: www.bankizywnosci.pl. Supplementary feeding programs are also carried out by Caritas, the Polish Red Cross, and the Polish Committee for Social Welfare. These organisations will also implement government feeding programs.

6b. Food-sharing

This is an initiative of food exchange between private individuals. People who have too much of one food item or cannot use it, just donate it to the Dining Room. There, those in need can pick them up. The food-sharing places most often take the form of cabinets or refrigerators. The exchange is free of charge, on the basis of goodwill and the desire to save food from being thrown into the trash. The food-sharing places are run by volunteers or other entities providing the place of exchange. Such places operate in: Warsaw, Grudziądz, Toruń, Szczecin, Zielona Góra, Wrocław, Opole, Jastrzębie-Zdrój, Kraków, Rzeszów and Mszana Dolna.

6c. Social stores

Social stores are shops are usually run by organisations, and sell products at prices lower than the market prices or provide a fixed amount and an assortment for free. These shops can be used by people with the lowest incomes. The stores sell wholesome products that meet all the rules, including hygienic, use-by date, food storage, etc. The shop in Gdańsk: <http://mopr.gda.pl/sklep-spoleczny-nowa-oferta-dla-potrzebujacych/>

6d. Food buses

Many cities in Poland, such as Warsaw, Wrocław, Kraków, Wrocław or Łódź, organise buses to deliver hot meals during the winter. The help is directed mainly to the homeless, but, as reported by the organisers, not only the homeless use this help. Poor, lonely and helpless people also come for a hot meal. This project complements the existing year-round support system for people in a homelessness crisis. Autumn and winter are the most difficult times of the year for the homeless, so additional support is so important. The idea of a bus service providing meals has proven itself over several years. Those in need are eager to use it when thermometers begin to show low temperatures.

7. A model method of cooperation in solving the problem of hunger

The most important goal of actions to solve the problem of hunger is, of course, to feed the most needy. However, it is very important for each local government unit to optimise costs and spend funds rationally. The analysis of solutions implemented in the city will allow assessing how effectively the food aid system is implemented and how funds are spent.

We propose a plan for solving the problem of hunger. This to be done according to the structure below.

1. Verification of customer needs and analysis
 - a. Number of social care clients
 - b. Number of residents in shelters, night shelters and eateries
 - c. Number of children benefiting from a nutrition subsidy.
 - d. Identifying the most needy groups – e.g. children, the elderly, people in a homeless crisis.

Analysis of the environment

- a. Food aid institutions
- b. Food aid organisations
- c. Informal movements to support the hungry
- d. Projects and programs (nutritional education, dietetics, healthy lifestyle)

Analysis of food expenses

- a. Financing of meals
- b. Benefits

c. Grants to organisations

d. Cost optimisation

Selection of activities, partners and recipients

a. Information campaigns

b. Aid mapping and filling in the so-called “White spots”

c. Ensuring the continuity of food (school breaks, quarantine, holidays)

Examples of city implemented initiatives

The World Day of Food and Fighting Hunger is one of the examples of activities that in Polish cities promote the assumptions of the second SDG. Providing a meal to people who are deprived of it is a compulsory task of the communes. The aid is granted on an as needed or periodic basis and has the intention of providing one hot meal a day for persons who, by their own efforts, cannot ensure it. Individuals or families may also receive assistance in kind, in the form of food products. Children and adolescents, in particular, need help in the form of hot meals while studying at school. This has been recognized by the authorities, and bodies running the facility may exempt parents or an adult student from part or all of the fees for meals in the event of a particularly difficult financial situation within the family. School meals are often the only hot and full meals that the poorest children consume during the day. Hence it is also very important to take care of these students on days off from school: during winter breaks, summer vacations or Christmas breaks. If the family does not benefit from the systematic support of organisations and entities, children may not obtain enough nutritious food.

Every year, on October 16, the Polish Red Cross organises an event in Bydgoszcz and in many other cities reminding the denizens of “World Food and Fighting Hunger Day” and the global problem of malnutrition and hunger. The aim of the campaign is to make Polish society aware of the extent of the problem of poverty and hunger. In 2021, its slogan was “We are turning hungry into a decent childhood”, and the main axis was to provide children in need with a hot meal and comprehensive care. In 2020, during severe epidemic restrictions, food collection was also organised, despite the abnormal conditions.

In 2021, on October 15 and 16 (Friday and Saturday), the Polish Red Cross in Bydgoszcz organised a food collection in Bydgoszcz supermarkets (Netto, Auchan, Carrefour, E’Leclerc), as well as a street fundraising, the proceeds of which were used to finance feeding those who are without, Polish Red Cross activities and the purchase of basic food for families in need. Additionally, on October 18, from 11.00 a.m. to 2.00 p.m. in the courtyard of the Polish Red



Photo 3. Food collection in the Red Cross tent in Bydgoszcz 16.10.2020 r.

Source: <https://expressbydgoski.pl/swiatowy-dzien-walki-z-glodem-bydgoski-pck-prosi-o-wsparcie/ga/c1-15851973/zd/52473381>, accessed: 12.05.2022 r.

Cross at street Warmińskiego 10, a hot meal was served to the homeless, the poor, the hungry and the needy, and the invited children from nearby primary schools in the vicinity of Śródmieście received a lunch and tasty buns funded by Bydgoszcz pastry shops.

Such campaigns have been conducted in Poland for many years, e.g. in Bydgoszcz for 19 years, but similar activities are carried out in most larger cities and in many medium and small ones. For example, in Koźienice, the District Branch of the Polish Red Cross provided seniors and children from the city and commune of Koźienice with food packages. Food collection was carried out as part of the Polish Red Cross campaign “Days of fighting hunger”, but also as part of the public task of the Koźienice commune - “Tasks related to the distribution of food for people and groups at risk of shortage”. Many educational institutions were involved in collecting food, such as Public Kindergartens No. 1, 3 and 4 in Koźienice, and primary schools No. 1 and 2 in Stanisławice, Janikowo and Gniewoszków. The packages were prepared for 40 seniors and 20 children from the city and commune of Koźienice. Among the products that have been collected there are, among others, drinks, sweets and various types of food with a long shelf life.

In Dąbrowa Górnicza, the organiser of the Dąbrowa's Day of Food and Fighting Hunger is usually the President of the Dąbrowa Families in Crisis Association. Help can be offered in many ways by:

- providing food necessary to prepare snacks for those in need and food packages,
- becoming a volunteer on the day of the event,
- sharing information on social media,
- disseminating information among those in need,
- making a donation.

In turn, in Mysłowice, as part of the World Food Day and Fight against Hunger, a huge cauldron with Silesian sour rye soup was placed in the market square. The action was aimed primarily at the lonely and homeless and the needy, but everyone who crossed the market square could take the opportunity to taste real Silesian sour soup. The soup was prepared by the Free Place Foundation, and the youth and seniors from Mysłowice joined the campaign. Similarly, in Kalisz, and organised by the CHOPS foundation, this special day in 2021 was an opportunity to cook and share pea soup. The inhabitants of Kalisz met at Towarowa street, where the Food and Drink Shop operates.



GOAL 3 - GOOD HEALTH AND WELL-BEING

DEVELOPMENT DIRECTIONS

- **Monitoring health and identifying the health needs of the population in relation to specific areas;**
- **Assessing the health situation in the country and its regions against other countries and regions of the world, identifying challenges and threats resulting from the processes of globalisation and other political, socio-economic processes of a global scope;**
- **Ensuring universal access to medical care**, increasing the share of medical services and their quality in the overall structure of services;
- **Strengthening primary and specialist medical care;**
- **Increasing the availability of the population to modern diagnostics and therapy**, as well as reducing the waiting time for diagnostics and treatment;
- **Providing support for hospitals and treatment centres in terms of infrastructure and equipment;**
- **Improving the residents' access to drugs, vaccines and basic and specialist health care points;**
- **Improving access to social and health insurance**, especially for people in difficult life situations, the unemployed, the homeless, etc.;
- **Reducing the incidence and mortality of civilisation and chronic diseases** (diseases of the circulatory system, respiratory system, malignant neoplasms, etc.);
- **Conducting preventive activities** reducing the number of people suffering from chronic diseases (increasing the detection of diseases in the early stages of development);
- **Preventing premature, avoidable deaths** (caused by, for example, cancer, cardiovascular diseases, smoking and environmental pollution, as well as suicide deaths, deaths among infants, mothers, children and the poor);
- **Promoting the fight against infectious diseases** such as HIV, tuberculosis, venereal diseases, hepatitis C and others;

- **Establishing a comprehensive infectious disease monitoring and treatment system** for rapid management and treatment in the event of an epidemic or pandemic;

Increasing public awareness of health, providing professional health information and consultation services in the field of public health;

Promoting the planning of healthy cities – including aspects of improving and maintaining the good health of residents in the processes of spatial planning and urban design and architectural, housing and urban development management;

- **Popularising the dangers of addiction** (alcohol, tobacco, drugs, gambling etc.);
- **Improving the availability and quality of services provided in specialist substance abuse treatment centres;**
- **Supervising and monitoring environmental pollution indicators** (air, water and soil quality, noise, waste, etc.) and taking actions to improve them;
- **Limiting the impact on health caused by polluted air, water, soil and noise** (reduction of total air pollution and by types of pollutants - carbon monoxide, sulphur dioxide, smog; chemical pollution of water in total and by types of pollutants - cadmium, manganese, mercury, lead, arsenic soil contamination - sulphur compounds, sodium compounds, nitrogen compounds, fluorine, chlorine, potassium, heavy metal compounds);
- **Identifying and countering health risk factors in the place of residence, work and education and health care facilities.**

PRIORITY TARGET GROUPS

- Scientific and research institutes
- Medical staff
- Volunteers
- Social workers
- Patients and their families
- Disabled and chronically ill people
- Elder people

- Pregnant women
- Single mothers or fathers raising children
- People with a low socio-economic status
- Young people neither studying nor working
- People struggling with addictions
- Drivers

MAIN AREAS OF ACTIVITY

- IMPROVING THE MENTAL HEALTH OF INHABITANTS
- ENHANCING THE PHYSICAL HEALTH OF INHABITANTS
- COUNTERING HEALTH INEQUALITIES
- INITIATING HEALTH PREVENTION
- COUNTERING EARLY MORTALITY
- IMPROVING THE QUALITY OF LIFE
- INCREASING PUBLIC AWARENESS OF THE NEGATIVE IMPACT OF ENVIRONMENTAL POLLUTANTS ON HUMAN HEALTH

Main areas of activity	Actions
<p>IMPROVING THE MENTAL HEALTH OF INHABITANTS</p>	<ul style="list-style-type: none"> • Using public, private and sector cooperation sectors to provide early intervention for mental health problems; • Providing specialist medical counselling and a community support system for people suffering from mental illnesses; • Providing practical and emotional support for residents suffering from chronic diseases (e.g. oncology); • Creating free professional psychological care points and support telephone numbers; • Popularising mental health care; • Undertaking actions to reduce the incidence of suicide among socially vulnerable groups of the population and in relation to men who, statistically, most often take their own lives.

<p>IMPROVING THE PHYSICAL HEALTH OF INHABITANTS</p>	<ul style="list-style-type: none"> • Initiating activities to reduce the scale of civilisational diseases (cardiovascular, malignant neoplasms, respiratory diseases) and deaths due to these diseases; • Introducing actions to reduce the incidence of social diseases (AIDS, venereal diseases, diseases caused by the consumption of alcohol, nicotine, drugs and other psychoactive substances) and deaths due to these diseases; • Implementing actions to support the reproductive health of the population (reducing the incidence of teenage pregnancies, providing early diagnosis and treatment of infertility, etc.).
<p>COUNTERING HEALTH INEQUALITIES</p>	<ul style="list-style-type: none"> • Providing support for the supply of medical equipment to individuals on a limited budget (e.g. corrective glasses, hearing aids, prostheses, rehabilitation equipment, wigs, specialised clothing and accessories); • Improving access to specialist health, nursing, midwifery, rehabilitation and psychological care (e.g. 24/7 medical / nursing / counselling and support points); • Reducing waiting time for diagnostics and treatment of social and civilisation diseases; • Supporting the activities of non-governmental organisations aimed at groups in need, e.g. victims of: domestic violence, rape and harassment, addicts and co-addicts; • Constructing and financially supporting health care homes; • Providing professional care for the elderly, organising financial aid for geriatric care facilities; • Expanding the scope of healthcare and providing various forms of support, including emergency and supportive care; • Implementing development programs for sanatoriums and rehabilitation centres; • Providing family planning counselling services, promoting knowledge about sexuality and rights associated with it; • Controlling the housing overcrowding rate and organising units servicing and facilitating the process of housing changeover.

<p>INITIATING HEALTH PREVENTION</p>	<ul style="list-style-type: none"> • Educating and popularising research and preventive treatment; • Organising preventive and screening tests in public spaces (e.g. cars, mobile points, health clinics, schools, cultural centres and others); • Organising vaccination points and promoting vaccine uptake; • Supporting addiction treatment (increasing the number and availability of facilities for the treatment of all types of addiction); • Implementing programs preventing the emergence of diseases and enabling their early detection (cancer, overweight, obesity and diabetes); • Implementing educational programs shaping proper pro-health behaviour among residents; • Conducting campaigns promoting compliance with hygiene rules; • Organising campaigns of free dental inspections; • Involving the scientific sector in conducting open lectures promoting healthy lifestyle, healthy food and proper eating habits; • Implementing measures to reduce tobacco consumption (e.g. limiting advertisements for tobacco products in public spaces, creating smoke-free spaces, organising information campaigns and initiatives aimed at young people); • Providing recreational and leisure space and facilities (parks, squares, forests, sports fields, swimming pools, campsites) and promoting spending free time “outdoors”; • Supporting healthy ways of getting around (walking, cycling and safe and accessible public transport).
<p>COUNTERING EARLY MORTALITY</p>	<ul style="list-style-type: none"> • Initiating actions to improve health and safety at work; • Improving the quality of medical services, as well as palliative care and hospice;

	<ul style="list-style-type: none"> • Introducing educational and information projects dedicated to vulnerable socio-demographic groups (people with low socio-economic status, long-term unemployed, victims of violence, etc.); • Initiating actions aimed at enhancing road safety (surface repairs and construction of sidewalks and bicycle paths, reconstruction of dangerous intersections, providing street lighting, equipping pedestrian crossings with traffic lights); • Implementing actions to alleviate psychosocial stress; • Introducing actions to improve the lifestyle of the population especially in relation to socially vulnerable groups (towards reducing addictions, greater physical activity, healthy eating, etc.).
<p>IMPROVING THE QUALITY OF HEALTHY LIFE</p>	<ul style="list-style-type: none"> • Controlling the birth rate among adolescents; • Ensuring the establishment of comprehensive, professional health clinic points, providing information activities dedicated to pregnant women, young mothers, seniors and others; • Developing the e-health and telemedicine area, including emergency telemedicine and supporting computerisation of the health system and centres; • Developing programs and tools for remote health monitoring: of the elderly, the chronically ill, patients suffering from asthma, heart disease, diabetics, etc.; • Raising awareness about health and promoting a healthy lifestyle and physical activity at all ages; • Organising senior clubs promoting active and healthy aging; • Raising the level of care for pregnant women, with particular emphasis on complicated pregnancy, as well as prenatal diagnosis and therapy; • Organising sports activities for a wide range of residents: students, families, seniors, the disabled; • Organising events promoting a healthy lifestyle, e.g. marathons, runs, bicycle rallies, hiking tours;

	<ul style="list-style-type: none"> • Developing care and neighbourhood services in the place of residence, as well as services using modern information and communication technologies, e.g. telecare; • Carrying out blood donation campaigns; • Introducing health insurance systems that are sensitive to the health of residents and to random events;
<p>INCREASING PUBLIC AWARENESS ON THE NEGATIVE IMPACT OF ENVIRONMENTAL POLLUTANTS ON HUMAN HEALTH</p>	<ul style="list-style-type: none"> • Monitoring of the air quality index and taking actions to improve it (e.g. weather alerts in case of exceeding the index of fine dust and solid particles in the air, or free tickets for public transport on such days); • Reducing road noise by: <ul style="list-style-type: none"> - introducing speed limits on main roads, - relieving housing estates from transit traffic, - installing sound-absorbing surfaces, - constructing acoustic screens / walls; • Improving cleanliness in cities, helping to reduce/control the incidence of social and civilisation diseases.

Examples of initiatives in cities

IMPROVING MENTAL HEALTH OF INHABITANTS - examples of initiatives

- **Development of cross-border cooperation in the field of helping people with autism on the Polish-Belarusian border** – a project of the Operational Program of Cross-border Cooperation Poland-Belarus-Ukraine, implemented in the period November 2019 - March 2022 by the Youth Aid Association Autistic Children and Children and Youth with related disorders “Wspólny świat” (Lubelskie Voivodeship) and the Department of Education, Sport and Tourism of the Administration of the city of Brest (Belarus). The amount of co-financing is EUR 2.00 million. Priority action: Support for the development of health care and social services. The project aims to improve the quality of life for families and individuals with autism from the Lubelskie Voivodeship and Brest Oblast. Thanks to its effects, they will be able to find professional, long-term help and care. The project provides for the creation of infrastructure and funding within the health and education system to

provide comprehensive support to children, adolescents and adults with autism spectrum disorder (ASD) and similar developmental disorders.

On the Polish side, activities will focus on the construction of a Community Nursing Home, a School for Work Preparation and a Permanent Residence for adults with autism (<https://www.pbu2020.eu/pl/projects2020/306>)

- **Mental Health Protection Program for the city of Lublin for 2018-2022** (https://bip.lublin.eu/gfx/bip/userfiles/public/import/rada_miasta_lublin/uchwaly/viii_kadencja/24_sesja_17-12-2020/770_xxiv_2020.pdf)

IMPROVING THE PHYSICAL HEALTH OF INHABITANTS - examples of initiatives

- **Enhancing epidemiological safety in the Polish-Belarusian border area** – the project of the Operational Program of Cross-border Cooperation Poland-Belarus-Ukraine, implemented in the period March 2019 - August 2021 by the Provincial Specialist Hospital in Biała Podlaska in Poland and the Regional Hospital in Brest, Belarus. Fund: European Regional Development Fund. Co-financing amount of EUR 2.87 million. Priority action: Support for the development of health care and social services. The aim of the project is to reduce the risk of a mass wave of infectious diseases (such as hepatitis C or HIV-AIDS) in the Polish-Belarusian border area, due to the increase in population movement within the border region between Poland and Belarus, by creating so-called “Epidemiological filters” (<https://www.pbu2020.eu/pl/projects2020/303>)
- **Improving cross-border healthcare in the field of cardiovascular diseases and intensive care in the region of Białystok (Poland) and Minsk (Belarus)** – a project of the Operational Program of Cross-border Cooperation Poland-Belarus-Ukraine, implemented in the period January 2020 - December 2022 by the Independent Public Healthcare Institution of the Provincial Complex Hospital J. Śniadeckiego in Białystok and the Regional Clinical Hospital in Minsk (Belarus). Fund: European Regional Development Fund. The amount of co-financing is EUR 2.15 million. Priority action: Support for the development of health care and social services. The aim of the project is to undertake the diagnosis and treatment of cardiovascular diseases and to provide intensive medical care to those in need. The project provides for the purchase of specialist intensive care equipment, postoperative devices for various departments, and a computer tomograph with a cardiological device for a hospital in Białystok. It also puts in place programs for provid-

ing residents with knowledge about the prevention of heart and circulatory system diseases (<https://www.pbu2020.eu/pl/projects2020/318>)

COUNTERING HEALTH INEQUALITIES - examples of initiatives

- **Better access to medical services in the cross-border region** – a project of the Operational Program of Cross-border Cooperation Poland-Belarus-Ukraine, implemented in the period July 2017 - August 2021 by the Healthcare Centre “Regional Pediatric Hospital in Brest (Belarus) and the Independent Public Healthcare Institution in Łosice (Mazowieckie Voivodea ship). Fund: European Regional Development Fund. Co-financing amount: EUR 1.10 million. Priority action: Support for the development of health care and social services. The aim of the project is to improve free access to modern medical services for a particularly sensitive socio-demographic group - the child population. The project envisages the following projects: purchase of specialist equipment for the diagnosis of cancer and heart diseases, as well as ultrasound and oxygen supply instrumentation; providing palliative care for children, establishing a “Relatives Club” where families of sick children can count on the support of psychologists and other specialists; organisation of a campaign promoting healthy lifestyles (<https://www.pbu2020.eu/pl/projects2020/336>)
- **A model health care program for countering osteoporosis in the area of the Polish-Belarusian border** (<https://www.pbu2020.eu/pl/projects2020/321>)
- **A joint initiative of the Mazovian Specialist Hospital of dr. Józef Psarski in Ostrołęka and the Lviv Regional Children’s Teaching Hospital “Ohmatdyt” so as to enhance access to healthcare services in the field of modern surgery** (<https://www.pbu2020.eu/pl/projects2020/allpriority?page=2>)

HEALTH PREVENTION - examples of initiatives

- **Program of Youth Leaders in Addiction Prevention and Health Promotion, addressed to people aged 14-22.** The program is organised by the Society for Prevention and Counteracting Addictions with headquarters in Toruń, and began in September 2019. The program aims to promote a healthy lifestyle in the youth environment. (<https://www.tppu.org/programy/4-program-mlodziezowych-liderow-profilaktyki-uzaleznien-i-promocji-zdrowia>)

- **Health policy program for 2019-2021 in the field of healthy eating for children of grades 1-3 of primary schools in Lublin “Eat with your brain”.** The aim of the program is to promote the principles of healthy eating and of shaping healthy lifestyle habits among the youngest inhabitants of Lublin. The program was implemented in 38 primary schools in Lublin. So far, around 3,000 students have been involved in the activities of the program. (https://bip.lublin.eu/gfx/bip/userfiles/_public/import/rada_miasta_lublin/uchwaly/viii_kadencja/24_sesja_17-12-2020/770_xxiv_2020.pdf)
- **City Breast Cancer Early Detection Prevention Program**, implemented in the city of Grudziądz, in 2019, by the Regional Specialist Hospital dr Bieganski and the City Hall. The program is addressed to city residents aged 40-49 and 70 and above with worrying symptoms or risk factors for breast cancer. (<https://grudziadz.pl/artukul/338/17038/profilaktyka-raka-piersi>)
- **“This is how Legnica breathes”** – a series of educational workshops aimed at people with a history of SARS-CoV-2, struggling with complications such as decline in fitness, shortness of breath, concentration and memory disorders. The project was created thanks to the cooperation of the City Hall with the Legnica hospital. Implementation deadline: September-November 2021. The project included free workshops conducted by specialists in the field of physiotherapy, dietetics and neurologopedics. (<https://www.miasta.pl/aktualnosci/tak-oddycha-legnica-wspolna-prozdrowotna-inicjatywa-miasta-i-szpitala>)

IMPROVING THE QUALITY OF LIFE IN HEALTH - examples of initiatives

- **Healthy and Active Senior Centres** – the project of the City Hall of Łódź aimed at social activation of elderly people in their place of residence. The main goal of the project is to provide health education and promote healthy and active aging. The idea behind the project is to create points in municipal clinics that will simultaneously serve as places for educational, recreational, health and social meetings, such as Internet cafes and common rooms. (<https://uml.lodz.pl/seniorzy/projekty/centra-zdrowego-i-aktywnego-seniora/>)
- **Registration, observation, care - cross-border cooperation of regional hospitals in Siedlce (Poland) and Minsk (Belarus) for the health of the mother and child** – a project of the Operational Program of Cross-border Cooperation Poland-Belarus-Ukraine, implemented in the period May 2019 - April 2022 by Mazowiecki Szpital Wojewódzki im. st. John Paul

II in Siedlce sp.z o.o. (Masovian Voivodeship) and the Regional Clinical Hospital for Obstetrics in Minsk (Belarus). Fund: European Regional Development Fund. The amount of co-financing is EUR 2.26 million. Priority action: Support for the development of health care and social services. The aim of the project is to ensure better access to high-quality healthcare for mothers and new-born children by acquiring new, fully equipped medical rooms and new medical vehicles in the hospital in Siedlce, and the purchase of a new IT network and specialist equipment for the maternity ward of the hospital in Minsk. Moreover, free prophylactic programs are to be conducted among pregnant women and new-borns (prenatal diagnosis, home CTG). It is assumed that the project will increase the safety of motherhood in the borderlands. (<https://www.pbu2020.eu/pl/projects2020/309>)

COUNTERING EARLY MORTALITY - examples of initiatives

- **Prophylaxis 40 plus** – a free examination package for the widest possible group of women and men over 40. Duration of the program - July-December 2021. Implemented by the National Health Fund. It includes diagnostic tests for 3 groups: for women (taking into account the health risks for women in this age group), men (taking into account the health risks for men in this age group) and the common package (measuring blood pressure, weight, height, waist circumference and calculation of the BMI index, assessing the regularity of the heart rhythm) (<https://www.gov.pl/web/zdrowie/profilaktyka-40-plus>)
- **Strengthening the potential of the Volunteer Fire Brigades in rescuing victims of accidents on the roads of the Lubelskie Voivodeship and the Volyn Oblast in Ukraine** – a project of the Operational Program of Cross-border Cooperation Poland-Belarus-Ukraine, implemented in the period November 2018 - October 2021 by the Association of Local Governments of the Bug Euroregion (voivodeship lubelskie) and the Municipal Department “Agencja Rozwoju Euroregionu Bug” and the Charity Foundation Ihor Palytsia “Tilky Razom” (Volyn region, Ukraine). Fund: European Regional Development Fund. The amount of co-financing is 641 thousand. EUR. Priority action: Addressing common security challenges. The aim of the project is to prevent road accidents in the Polish-Ukrainian borderland by supporting voluntary rescue units, equipping them with modern tools and organising training for rescuers in the field of safety and protection of road users. As part of the project, the educational campaign “Safe pedestrian” was organised which

emphasised first aid training and road safety, which resulted in an increase in the awareness of residents about the dangers on the roads (<https://www.pbu2020.eu/pl/projects2020/351>)

INCREASING SOCIAL AWARENESS ON THE NEGATIVE IMPACT OF ENVIRONMENTAL POLLUTANTS ON HUMAN HEALTH AND ENHANCING THE QUALITY OF LIFE IN HEALTH - examples of initiatives

- **Joint response of health care institutions to climate-related diseases and health threats** – project of the EIS Poland-Russia Cross-Border Cooperation Program 2014-2020, implemented by the Provincial Hospital of dr. L. Rydygier in Suwałki (Poland) and Cherniakhiv District Hospital (Russia). Budget EUR 2.17 million. The overall goal of the project - adaptation of the inhabitants of the Polish-Russian borderland to the negative effects of climate change in terms of diseases and health threats. The main results of the project: one joint action aimed at adapting the borderland inhabitants and the health service to climate change, covering a series of 12 trainings, meetings and knowledge exchanges (<https://szpital.suwalki.pl/pl/wspolna-odpowiedz-instytucji-ochrony-zdrowia-na-choroby-zwiazane-z-klimatem-i-zagrozenia-zdrowotne/>)
- **Developing a cross-border natural hazard management system** – a project of the Operational Program of Cross-border Cooperation Poland-Belarus-Ukraine, implemented in June 2011-May 2012 by the Provincial Headquarters of the State Fire Service in Lublin (lead partner), the Provincial Headquarters of the State Fire Service in Rzeszów and the Main Board Of the Ministry for Emergency Situations and Civil Protection against the Aftermath of the Chernobyl Disaster in Lviv Oblast (Ukraine). Fund: European Regional Development Fund. Co-financing amount of EUR 1.37 million. Priority action: Environmental protection in the border area. The main goal of the project is to create Polish-Ukrainian cooperation platforms (including joint working groups) in the implementation of a cross-border management system in natural hazards. Main activities: creating a joint rescue management system, Polish-Ukrainian working groups; conducting trainings on the use of modern rescue equipment: <http://www.pl-by-ua.eu/contract.php?id=7>)
- **Improving the cross-border environmental protection system in the Księżpol commune in Poland and in the city of Czerwonogród in Ukra-**

ine - through the development of sewage infrastructure (<https://www.pbu2020.eu/pl/projects2020/242>)

- **Protecting the waters of Lake Solina and the healing waters of the resort of Schodnica - a common challenge, a chance to preserve and use the potential of natural heritage.** (<https://www.pbu2020.eu/pl/projects2020/245>)

Good practices from Polish cities participating in the “Action Plan for Cities”

Glinojek

The city is investing in a modern system of renewable energy sources that favours the formation of low emissions and minimises the presence of smog in the city of Glinojek. In 2019 alone, 70 sets of photovoltaic panels were installed in the city and the commune of Glinojek, including 68 on residential buildings and 2 on public utility buildings. By 2020, another 85 sets of solar collectors were installed, including: 84 solar collectors on private residential buildings and 1 set consisting of 80 solar collectors on a public building – the housing estate boiler house in Glinojek, In addition, domestic hot water heat pumps were installed in residential buildings. The collectors were installed and are run as part of a partnership project entitled “Installation of renewable energy systems in the city of Ciechanów, Glinojek Commune, Opinogóra Górna Commune and Strzegowo Commune”.

Beyond the aforementioned, an inventory of individual heat sources was carried out in the commune. The aim was to obtain knowledge about the number of low-emission sources, and then to introduce measures that will improve the health and quality of life of the inhabitants of the city and commune of Glinojek. The inventory also made it possible to estimate the number of inhabitants interested in exchanging current heating units and to plan activities for the replacement of heat sources with more ecological ones. Thus, the commune fulfils one of the obligations resulting from the Air Protection Program. The implementation of the task contributes to the improvement of the air quality in the city and the commune of Glinojek.

In Glinojek, places for rest and recreation are being created, an example is the new city park, where plantings, lawns and alleys have already been created. Another place for rest and recreation in Glinojek is a skatepark located near the existing playground and outdoor gym, where there is a toboggan hill with a viewing terrace and a labyrinth of new plantings.

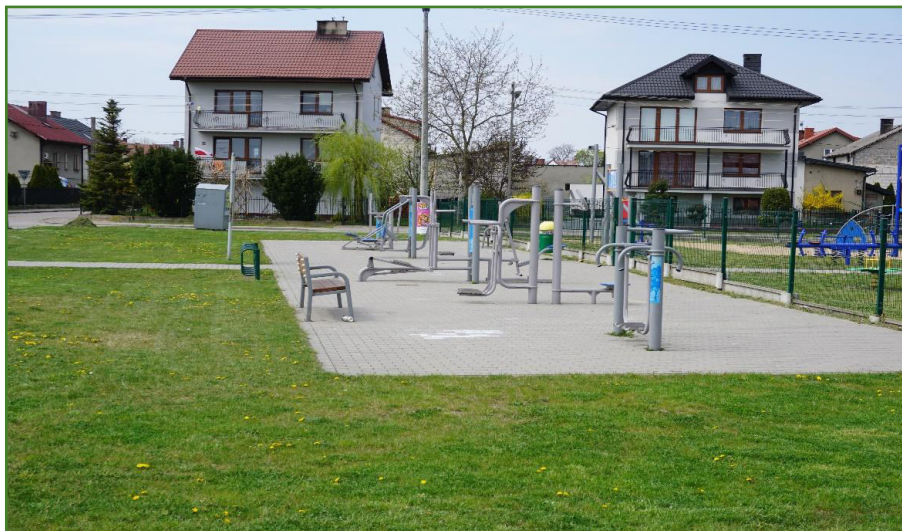


Photo 4. Playground in Glinojec. Source: City Hall in Glinojec

Kołobrzeg

One of the tasks of the Kołobrzeg commune is to take care of the health of its inhabitants. Kołobrzeg carries out this through a number of activities aimed at preventing ill-health and by implementing health policy programs. As part of these activities, the city also supports the Regional Hospital in Kołobrzeg.

Kołobrzeg is a city with a large number of seniors, ranking 45th in Poland in terms of the share of elderly people in the total number of inhabitants. The priority is therefore to take care for the fitness of seniors and to keep them in good health, so that the costs associated with the provision of care services do not increase. In Kołobrzeg, non-governmental organisations have been taking active measures for enhancing seniors health for years, and in order to counter the problems related to the life and functioning of older people in Kołobrzeg, the “Rehabilitation for seniors of the City of Kołobrzeg for the years 2019-2023” program has been developed. The program was approved for implementation by Resolution No. XV / 201/19 of the Kołobrzeg City Council of November 5, 2019. So far, almost 700 seniors have benefited from rehabilitation under the program. In 2020, the amount of PLN 200,000 was allocated for the running of the program. Rehabilitation activities take place at the Intermedical Clinic,

run by Lech Investment sp.z o.o., the “Dozamel” Rehabilitation and Recreation Centre, the Paulina Oracz-Kierakiewicz Health and Biological Regeneration Centre and the Kołobrzeg Spa Resort. In addition, in 2020, sixteen grants were awarded to non-governmental organisations for initiating activities in the field of prophylaxis and health promotion, as well as therapeutic activities for a total amount of almost PLN 130,000 zloty.

After analysing the possibilities of implementation and the financial possibilities of the city, a decision was made on the development of five health policy programs:

- 1) Providing rehabilitation for seniors of the City of Kołobrzeg for 2019-2023,
- 2) Enabling access to treatment of infertility by way of the method of in vitro fertilization for the inhabitants of the city of Kołobrzeg for the years 2019-2023,
- 3) Enacting a health policy program in the field of vaccination against seasonal flu for residents of the Kołobrzeg City Commune aged 65 and over,
- 4) Providing prevention and early detection of osteoporosis for the inhabitants of the City of Kołobrzeg for the years 2021-2023.
- 5) Enabling prevention of addiction to alcohol and other psychoactive substances for the inhabitants of the Kołobrzeg City Commune for the years 2022–2023 “.

Health policy programs no. 1, 2, 4 have the positive opinion of the President of the Agency for Health Technology Assessment and Tariffs, and programs no. 3 and 5 were created on the basis of the recommendation of the President of the Agency. Such programs are not reviewed by the Agency. The commune, before adopting such a program, sends to the Agency a declaration of compliance of the health policy program with the recommendation for action. Here, funding is obtained from the National Health Fund for health policy programs. The implementer of the health policy program is selected in the competition of offers announced on the basis of the Act on health care services financed from public funds.

Łask

For the local government of the Łask Commune, natural wealth means the obligation to implement development projects that take into account the elements of countering climate change and its effects, in accordance with the principles of ecohydrology while increasing the potential of the biosphere. Another indispensable element constituting a comprehensive approach to the implementation of investments in the Łask Commune is taking into account the sphere of health and life protection of the commune’s inhabitants and improving

their quality of life. In addition, due to the fact that the Łask Commune is an urban-rural commune where social, economic, cultural and educational life is mainly concentrated in the city as the main urban centre, projects focused on urban sustainability are also a crucial element of the implementation of activities aimed at the development of the commune and community to make the town a safe and stable centre that is inclusive and sustainable with the surrounding functional areas (rural areas).

Hence, the idea of implementing two complementary undertakings:

Construction of a multifunctional water reservoir “Łask” as a model solution for the sustainable development of the region with special emphasis on the adaptation of river basins to climate change;

“By bike through the green and blue Commune of Łask” consisting in creating routes and educational, recreational and tourist infrastructure allowing for safe, harmless to Nature use of the commune’s values, so as to meet the current needs of the city’s development without reducing the chances of future generations to access the richness of the natural environment.

Preserving the natural values of the Grabia River Valley is also an impulse for development and to generate benefits for the society in terms of exposing natural values along with an educational function, while enhancing resistance to climate change (by creating a retention reservoir, preventing the formation of heat islands by designing lowered lawns and rain gardens and increasing the area of green areas in the city).

The commune of Łask undertakes systematic activities in the field of modelling the green public space of the commune in a way that combines functionality with care for the natural environment, while maintaining and effectively managing them in order to improve the quality of life of the local community. The aim of a number of projects carried out by the Commune of Łask was to create green public spaces, which are to be of particular importance for satisfying the needs of residents, by improving their quality of life, and favouring the establishment of positive social contact, while maintaining / creating their pro-ecological functions by way of initiating practices that enhance the condition of the natural environment by including, among others, the creation of areas that offer shelter against strong sunlight and noise, the prevention of water shortage and improvement of the water balance – an initiative, the area of which is addressing a situation that is beginning to be lacking in the Łask commune. As part of the intended investments, the needs of a wide group of recipients were taken into account – elderly people, people with special needs, children and adolescents - while respecting the natural environment.



Photo 5 and 6. The Grabia River Valley. Source: Town Hall in Łask



GOAL 4 QUALITY EDUCATION

DEVELOPMENT DIRECTIONS

- **Strengthening the links between the education system, employers and the socio-economic sector;**
- **Improving access to training, courses, internships and apprenticeships;**
- **Popularising the philosophy of lifelong learning** and the provision of learning opportunities and gaining experience regardless of age;
- **Adapting training and educational offers to the needs of the local labour market;**
- **Improving the quality of career counselling** for youth and adults;
- **Enhancing the quality and attractiveness of all forms of improving professional qualifications and provided educational services;**
- **Creating conditions for the development of education;**
- **Equalising educational opportunities**, reducing educational gaps and ensuring equal access to education for all;
- **Promoting education for sustainable development;**
- **Improving the innovativeness of education**, taking into account soft and digital competences, the use of foreign languages, creativity, entrepreneurship, taking initiative, using modern tools at work, etc.;
- **Increasing emphasis on practical and vocational training;**
- **Establishing cooperation between educational centres**, including international institutions;
- **Developing non-formal methods of teaching and learning;**
- **Supporting initiatives aimed at enriching and making the cultural offer more attractive;** addressed to all residents, promoting active participation in cultural life in the city and spreading knowledge about multiculturalism;
- **Implementing simple, cost-effective solutions to popularise educational content**, especially those using information technologies and media;
- **Enhancing the Inclusion of support and improving the quality of education in city development strategies;**
- **Improving the mental well-being of children and adolescents in the pre-school and school ages.**

PRIORITY TARGET GROUPS

- Pupils
- Students
- Educators
- Guardians
- Trainers
- Research institutions
- Scientific institutions
- Managing staff of educational institutions
- Administration
- Volunteers
- Non-governmental organisations

MAIN AREAS OF ACTIVITY

- IMPROVING THE QUALITY AND ATTRACTIVENESS OF THE EDUCATIONAL SERVICES PROVIDED
- IMPLEMENTING INNOVATIVE SOLUTIONS IN THE AREA OF EDUCATION
- STRENGTHENING THE LINKS BETWEEN THE EDUCATION SYSTEM AND EMPLOYERS
- POPULARISING A PHILOSOPHY OF LIFELONG LEARNING
- OFFERING ADVISORY AND PSYCHOLOGICAL SUPPORT FOR YOUTH AND ADULTS (INCLUDING EDUCATION WORKERS)

Main areas of activity	Actions
IMPROVING THE QUALITY AND ATTRACTIVENESS OF THE EDUCATIONAL SERVICES PROVIDED	<ul style="list-style-type: none"> • Expanding the curriculum content taught so as to improve the acquisition of basic and general skills; • Expanding the educational offer with evening and hybrid schools that implement the curriculum via the Internet; • Enabling people raising their professional qualifications to acquire additional skills that will be documented in order to be able to use them on the labour market (e.g. certificates, training, driving license, etc.);

- **Supporting teachers and educators**, facilitating the development of competences, organising free training, experience exchange panels, etc.;
- Organising various initiatives to **raise awareness about global education**, as well as ways of functioning and problems of the modern world and sustainable development;
- Initiating actions to **prevent educational and social exclusion** of children and young people who achieve lower results in education;
- **Expanding educational offers related to science about sustainable development and ecology at all educational levels**;
- **Organising educational competitions**, awarding prizes in the form of: scholarships, paid internships, courses for the most talented pupils and students - which will enhance their scientific potential;
- **Providing support for the teaching base** in schools and other educational institutions (furnishings, equipment, teaching tools, laboratories);
- **Co-financing of development programs** increasing the quality of educational services provided;
- **Providing support (including financial) for teachers and the use of other types of incentives** to conduct optional, thematic activities beyond the framework of the curriculum, aimed at extending the content learned in compulsory classes;
- **Providing kindergartens and nurseries with high-quality care and education services** with universal access to language learning;
- **Modernising and adapting schools** to take into account the needs of children with disabilities and special educational requirements;
- **Providing infrastructure and adequate teaching support staff** in all public schools (psychologists, educators, teachers of integrated education, nurse, dentist, etc.);

**IMPLEMENTING
INNOVATIVE
SOLUTIONS IN THE
AREA OF EDUCATION**

- **Initiating pilot educational projects;**
- **Implementing new technologies** in education, creating and dissemination of digital educational resources;
- **Popularising the application of an interdisciplinary approach in teaching;**
- **Popularising soft skills and the ability to cooperate as key competences;**
- **Developing informal learning spaces**, e.g. organisation of thematic educational workshops for children (architectural, ecological, IT, mechatronic, art, handicraft, music, theatre, etc.);
- **Arranging observation visits and student exchanges and teachers** from various educational centres, including international ones;
- **Organising educational trips and lessons away from school buildings**, subsidising the costs of travel and organising such methods of conducting lessons;
- **Implementing educational sightseeing tours and cultural activities** that enable a better understanding of the city and which enhance the living environment for children and adolescents;
- **Extending the forms of conducting educational activities and methods of acquiring knowledge** with specialist training, multimedia presentations, educational films, workshops, e-learning and online courses, webinars, articles, podcasts, games and activities, theatres for children and others;
- **Enhancing cooperation with non-governmental organisations** conducting innovative educational projects and facilitating their implementation in schools;

<p>STRENGTHENING THE LINKS BETWEEN THE EDUCATION SYSTEM AND EMPLOYERS</p>	<ul style="list-style-type: none"> • Introducing an appropriate financial incentive for employers to invest in on-the-job training; • Popularising and consolidating the model of dual vocational education; • Enhancing the acquired skills and knowledge required by employers and work-based learning; • Establishing contacts with the business sector so as to initiate cooperation with educational institutions; • Initiating observation visits to companies and enterprises operating in the city, as well as public organisations, foundations, NGOs etc.; • Monitoring the needs in the local labour market, researching the demand for professions in the city and in the more defined labour market; • Undertaking initiatives to coordinate the vocational education offer with neighbouring leading bodies (poviats) in order to better match the market demand; • Extending the scope of providing services in the field of career counselling and determining predisposition to the profession (e.g. publishing and delivering information materials to schools, organising individual consultations with a career counsellor, conducting workshops, undertaking predisposition testing, etc.);
<p>POPULARISING THE PHILOSOPHY OF LIFELONG LEARNING</p>	<ul style="list-style-type: none"> • Expanding adult education programs; • Enhancing the involvement of adults in learning in its various forms and places; • Initiating the creation of generally accessible schools for all; • Providing access to public space (rooms, squares, meeting places) for initiatives aimed at professional development and the acquisition of new skills by adults. Cooperating in this area with non-governmental organisations;;

	<ul style="list-style-type: none"> • Distributing free newsletters, newsletters and other educational materials and publications (primarily in digital form); • Implementing advisory and training programs for adults, especially targeting people at risk of exclusion, with low income and the lowest professional qualifications and education (through training, individual mentoring and consultation meetings, free provision of educational services, courses, etc.); • Creating a network of teachers and educators for professional development and exchange of experiences;
<p>OFFERING ADVISORY AND PSYCHOLOGICAL SUPPORT FOR YOUTH AND ADULTS (INCLUDING EDUCATION WORKERS)</p>	<ul style="list-style-type: none"> • Ensuring access to psychological care in every educational institution; • Providing counselling and psychological support for teachers, including workshops, activities for teachers to help reduce the psychological burden on students; • Providing psychological support for graduates entering the labour market or changing jobs.

Good practices from Polish cities participating in the “Action Plan for Cities”

Gdańsk

Since the beginning of the 21st century, Gdańsk has been undergoing dynamic changes, fundamentally transforming both the structure of development and the conditions and directions of further development. These changes include intra-city processes as well as external changes in the economic, environmental, social and cultural environment. The changes are characterised by high dynamics, additionally reinforced by the COVID-19 pandemic in 2020-2022, which results in the need to revise the view on further development opportunities.

The city has so far developed a number of activities that constitute an excellent catalogue of good educational practice in relation to the circular economy. One of the most important turned out to be the “Gdańsk without plastic” campaign, which has been running in the city since February 2019. Gdańsk was the first city in Poland to give up plastic packaging within the walls

of the City Hall. Currently, the principles of the campaign are being gradually transferred to the units and companies subordinate to the city.

Seasonal and holiday periods are an excellent opportunity to remind residents about the rules, as well as to inspire them to act for “less waste”. Hence, educational campaigns such as “Don’t throw it away, pass it on” are constantly being carried out in the context of spring cleaning.

On the sidewalks, at a dozen or so street inlets and two retention reservoirs in Gdańsk, graphics made with the use of ecological paints appeared, drawing attention to the problem of rainwater contamination with plastic waste. The campaign aims to clearly and legibly communicate how our seemingly harmless actions (e.g. throwing cigarette butts out onto the street) have a real negative impact on the environment.

The city, together with the Department of Utilisation, carries out annually the campaign “Rent a Christmas tree for Christmas”. This has a charitable and educational purpose. Its main goal is to sensitise people to the needs of animals and Nature and to introduce the principles of the Circular Economy - a quote: “Remember that the tree that you take care of during the holiday season will return to circulation when you hand it over to us. We will take care of it tenderly in our nursery, so that it is ready for next year. „

The city of Gdańsk has launched the “Clean City of Gdańsk” application, thanks to which users can track the waste collection schedule on an on-going basis, but more importantly, it has a waste dictionary that clearly suggests how to properly handle waste, e.g. where to put “receipts”. The Clean City of Gdańsk festival allows residents to acquire real skills and knowledge of how to run a zero and less waste household by participating in workshops, i.e. cooking with leftovers, using the services of a seamstress.

As part of the “Gdańsk Eco House” competition, people / families who are already running or trying to run their households in the spirit of less waste will be recognised. Their selection will allow us to find specific ambassadors of such a lifestyle, setting a real example for others.

The platform integrating circular economy services and initiatives will allow Gdańsk citizenry to find places of repair services in a clear and legible way and, through the possibility of its on-going updating, to activate residents to support these types of services.

Working directly with multi-unit property managers will directly involve people who are the liaison between the office and the residents of these properties in creating effective solutions dedicated to this specific development, as well as improving communication with residents.



Photo 7. Sample graphics on the streets of Gdańsk. Source: City Hall in Gdańsk



Graphic 1. Graphics used for the action “Rent a Christmas tree for Christmas”. Source: City Hall in Gdańsk

The new formula of the Clean Up the World 2.0 campaign will activate not only school children and youth, but also other social groups, i.e. employee volunteers, divers, etc.

The launch of the Ecological Education Laboratory will enable the implementation of didactic classes in a dedicated space. Classes conducted by professional educators in the field of zero and less waste in the form of workshops will attract children and young people in acquiring knowledge in an attractive and effective way.

The Gdańsk Gazebo Halls give residents the opportunity to ask questions, dispel any doubts regarding the handling of waste as close as possible, i.e. at their own garbage cans, at any time convenient for them during one day. They also make it possible to obtain information on still unresolved problems or new ones, thanks to which the provision of city services takes on a character dedicated to the needs of its denizens.

Residents have the opportunity to use the produced compost, generated from bio waste by the Department of Utilisation in Gdańsk, as part of the annual Black Gold Gardeners campaign. The action gives a tangible opportunity to implement actions in accordance with the principles of a closed loop.

Halinów

There are five educational institutions, one kindergarten and one nursery in the Halinów Commune. The commune achieves individual goals by participating in national and European programs that result in the improvement of competences, skills and attitudes useful on the labour market for children and young people, as well as in terms of the availability of sports and recreational infrastructure. In the last two years, the commune has enacted six projects in the above-mentioned subject and two more projects in the current year. Thanks to the activities carried out, children from five educational institutions – 562 students – have developed their skills. Moreover, 62 laptops for schools were purchased, and a professional language lab was equipped and launched. The commune also participates in the Mazowiecki program of preparing schools, teachers and students for distance learning. The implemented projects help to provide equal opportunities for children and young people in accessing high-quality education and educational infrastructure. Sports infrastructure in schools and at schools is being expanded and modernised, and school playgrounds are also being modernised. These activities are consistent with the strategic documents of the commune.

In terms of model local practices related to the sphere of education, the commune of Halinów has put in place a policy aimed at expanding school and kindergarten infrastructure, as well as care infrastructure - in order to ensure comfortable conditions for the stay and education of children and adolescents.

These activities are important for the commune authorities. As indicated above, in 2018, the first nursery with 100 places for children was built in the commune. Now, less than 3 years after the creation of the first nursery, it is planned to build a new, second nursery in the commune for another 100 places. Herein, the activities have intensified, a tender for the construction of a nursery has already been announced.

Modernisation of the existing schools is necessary to adapt the conditions in the institutions to the changing technical and user requirements. At the moment, thermal enhancement of the school in Okuniewo is planned, and ultimately also the expansion of the school. In addition, in 2022 and 2023, a comprehensive modernisation of the gym at the school in Halinów will take place.

Activities in the field of cultural investments will provide a wider range of opportunities for general cultural development in the commune. Modernisation of the Cultural Centre and opening it to the needs of children and youth is one of the elements of a comprehensive approach to the development of the young generation. The planned construction of a new library building in the Park in Halinów, which is intended to come about in the near future, is also a response to the need to ensure access to culture. The existing seat of the library was located in such a small space that the facility was not able to carry out activities for the benefit of the inhabitants of the commune. In the designed building, the library area itself will increase fivefold, which will give the possibility of carrying out various activities for children and youth in the commune.

An additional project is to provide safe access to school by way of the construction of bicycle paths leading to the schools in Halinów, Brzeziny and Cisie. This project has contributed to the dissemination of the positive trend of using a bicycle instead of a car, and made it possible for residents to choose to bicycle. As a consequence, especially in the summer period, residents often choose to commute by bicycle instead of car, which also translates into a reduction in the amount of hazardous substances released into the air.

Jasło

Since 2014, Jasło has been implementing the Jasło City of Knowledge Program – a strategic development program put in place by the City in cooperation with external partners, the aim of which is to create a climate for acquiring knowledge for all inhabitants of Jasło, and thus increasing their competitiveness on the labour market and enhancing the cultural development of Jasło. The following achievements should be emphasised: the implemented

project entitled 'Jasielska Scientific League' consists of encouraging the youngest primary school students from Jasło to develop their scientific interests and passions by independently formulating research problems, which are then solved by groups of 3-4 people under the supervision of teachers. The results of the work were presented at Jasło's Science Festival. Moreover, the Children's University of Jasło was launched (approx. 100 children) and the University of the Third Age was supported. In addition, the digital infrastructure of schools was rebuilt. Furthermore, as part of the Program, the concept of the Centre for Technology, Culture and Entrepreneurship was developed – a multifunctional centre for the development of knowledge in Jasło.

Starachowice

The city has had a difficult period of economic transformation behind it. The collapse of industry caused enormous unemployment and a number of social problems. Currently, the biggest challenge for the city are demographic issues (aging society and depopulation), as well as activities related to care for the natural environment and countering climate change (torrential rains, heat islands). For several years, Starachowice has been successively designing and implementing activities aimed at, on the one hand, levelling the inner-city development disproportions and increasing the quality of life of the inhabitants, and, on the other hand, protecting the natural environment, enhancing biodiversity and taking care of air quality. One of the basic activities carried out by the city since 2016 is the revitalisation process, the directions and activities of which are set out in the Municipal Revitalisation Program for the Starachowice Commune for the years 2016-2025. As part of the activities planned in the revitalisation program, the city has implemented several dozen social projects (e.g. building a community centre and a crisis intervention centre, enacting activities aimed at young people) and infrastructure projects (e.g. thermal modernisation of buildings, connecting municipal resource buildings to the municipal heating network, purchasing low-emission rolling stock, developing the city park, enhancing the bicycle path system, greening the city, cleaning the water reservoir).

Szczawno-Zdrój

Since 2015, the construction of the largest investment in the history of Szczawno-Zdrój has continued: The educational, sports and recreational complex at Słoneczna 1A - worth approximately PLN 25.4 million. The decision to

build a new school and kindergarten facility was made due to the unsatisfactory technical condition of the existing educational institutions. The current facilities do not meet today's technical standards for buildings in terms of utility and fire safety. The financial analysis showed that the cost of reconstruction of the existing facilities in order to adapt them to the requirements of current technical regulations is disproportionately high in relation to the cost of building a new facility, therefore such a proposition was economically unprofitable. In addition, the location of the school and kindergarten complex is important, because it is being built on the premises of a modern sports and recreation complex, which includes a full-size sports hall built in 2015, an athletics facility with a football pitch put into use in 2016 and an indoor swimming pool "Dolnośląski Delfinek" completed in 2020.



GOAL 5 GENDER EQUALITY

DEVELOPMENT DIRECTIONS

To prevent discrimination, combat harmful stereotypes and strengthen women's organisations:

- **Counteracting discrimination against:** women, sexual minorities and transgender people;
- **Combating the causes that create inequalities between men and women;**
- **Providing equal access for women and men to: participation in public life, information, education, the labour market, holding managerial positions and exercising power, and respecting property rights, regardless of gender;**
- **Promoting gender equality and raising public awareness of equal treatment;**
- **Eliminating the social narrative based on stereotypical thinking about the role of women in families,** promoting the division of household duties and professional activity by both parents;
- **Enhancing the use of information and communication technologies to raise awareness of women's rights;**
- **Seeking to empower and inspire women and men** and build self-esteem;
- **Promoting social responsibility for equalising opportunities** by providing public services;
- **Striving for and respecting the rights of every human being to self-determination,** regardless of gender;
- **Strengthening the activities of grassroots organisations working for women's rights.**

In terms of access to power, managerial positions and public life:

- **Increasing the participation of women at management levels** in both the public and private sector;
- **Increasing the presence of women in management boards** and public institutions at all levels;
- **Enhancing social inclusion of middle-aged women** who, for family reasons (caring for elderly, sick family members, caring for grandchildren), remain excluded from professional life;
- **Planning a gender budget and equal opportunities;**

In the field of professional work and education:

- **Equalising life chances** for women and men by improving access to education;
- **Monitoring and controlling the employment rate of women and men;**
- **Improving the situation of women on the labour market**, including support and development of flexible employment and working conditions;
- **Reducing the gender pay gap, including improving wage transparency** to ensure fair and competitive wages for both genders;
- **Improving access to courses and training aimed at enhancing women's professional qualifications;**
- **Expanding the knowledge of employers and employees about mechanisms and instruments facilitating the reconciliation of work and family life;**
- **Supporting business start-up activity by women;**
- **Increasing women's access to education and technical skills;**

In the field of counteracting violence:

- **Recognising and combating all forms of violence against women and girls**, such as: physical and psychological violence, stalking, sexual violence, rape and harassment;
- **Countering violence against sexual minorities and transgender people;**

Regarding reproductive rights:

- Protecting women's health and reproductive rights;

In the field of childcare and unpaid domestic work for women:

- **Increasing access and ensuring an appropriate number of places in nurseries and kindergarten sections**, investing in the above-mentioned facilities;
- **Recognising and appreciating women caring for children and doing housework** in the social narrative and by improving access to public services, infrastructure and welfare;
- **Providing access to basic amenities for women and children in urban public spaces;**
- **Raising social awareness of the harmful inequalities in the performance of unpaid work** and care at home by women in order to eliminate this phenomenon;
- **Implementing a policy based on the discrimination of gender-related criminal behaviour.**

PRIORITY TARGET GROUPS

- Women
- Children and youth
- Associations
- Non-governmental organisations
- Activists
- Officials
- Teachers and educators
- Healthcare professionals
- Psychologists and therapists
- Lawyers
- Police services
- Self-help groups
- Volunteers

MAIN AREAS OF ACTIVITY

- PROVIDING EQUAL OPPORTUNITIES AND EQUAL TREATMENT OF WOMEN AND MEN
- IMPROVING THE SITUATION OF WOMEN
- RESPECTING WOMEN'S RIGHTS
- COUNTERACTING THE DISCRIMINATION OF SEXUAL AND TRANS-GENDER MINORITIES

Main areas of activity	Przykładowe działania na rzecz celu
PROVIDING EQUAL OPPORTUNITIES AND EQUAL TREATMENT OF WOMEN AND MEN	<ul style="list-style-type: none">• Developing and implementing equal opportunities plans;• Providing services adapted to both genders - monitoring and controlling employment rates in the city;• Initiating planning and revitalisation focused on providing mixed functions, including public places that are designed to be accessible for both genders and for young children;

	<ul style="list-style-type: none"> • Enhancing the provision of gynaecological and andrological care, including free tests and follow-up visits; • Providing universal access to psychological and therapeutic support centres for parents who struggle with postpartum depression, a sense of isolation, multiple births or mental health disorders; • Counteracting the hegemony of industries operating in the city, dominated by one gender; • Organising training for employers aimed at increasing awareness and incentives to ensure flexible working conditions for parents and non-discrimination in the employment of young women; • Providing advisory and administrative support in the field of starting a business, which will be directed mainly to women; • Organising conferences, counselling and career workshops, including initiating meetings with employers and experts who will allow professional inclusion in industries dominated by one gender, e.g. IT, mechatronics, education; • Organising social campaigns promoting equal pay; • Constructing new, municipal kindergartens and nurseries, including all-day centres and centres adapted to the care of children with disabilities; • Providing all-day schools combining educational services and caring that allow parents to reconcile working life with family responsibilities; • Implementing programs aimed at raising awareness of threats related to cybercrime and the use of fraud;
<p>IMPROVING THE SITUATION OF WOMEN</p>	<ul style="list-style-type: none"> • Providing incentives for companies employing mothers of young children, mainly in male-dominated industries (e.g. thanks to subsidies);

	<ul style="list-style-type: none"> • Creating programs focusing on the integration of the labour market for women, e.g. supporting women in paid work and achieving self-fulfilment through employment; • Organising professional counselling and support points in returning to work dedicated to women during or after maternity leave, or single parents and women working in precarious employment conditions; • Introducing facilitations for running businesses related to the provision of childcare services; • Co-financing of courses and training dedicated to unemployed women; • Organising educational activities of a technical nature (e.g. robotics) for girls; • Organising and/or providing financial support for single mother homes; • Undertaking investments extending the range of services offered by single mother's homes; • Establishing caregiver support centres providing practical psychological help, as well as counselling and advocacy services for unpaid people who care for their relatives; • Providing social infrastructure that is sensitive to the needs of women (e.g. public toilets, baby changing facilities, etc.); • Initiating the creation of free distribution points for sanitary products, which will be available in public places, including schools;
<p>RESPECTING WOMEN'S RIGHTS</p>	<ul style="list-style-type: none"> • Implementing programs aimed at solving the problem of discrimination against women, as well as the treating of women worse than men; • Establishing and supporting the activities of plenipotentiaries for women or anti-discrimination, women's councils and other bodies that work for equal treatment in public institutions;

- **Involving associations and non-governmental organisations working** for the equal treatment of women in the municipal public debate;
- **Collaborating with grassroots women’s rights organisations, “women’s” associations and activists** who document violence and discrimination against women and mobilize efforts to stop abuses;
- **Organising social campaigns against harassment, violence and abuse of women and children;**
- **Providing professional medical care and psychological care of women experiencing domestic violence** by initiating the creation of telephones, support centres and on-call, 24-hour clinics;
- **Organising charity actions and fundraisers** focused on helping women in difficult life situations;
- **Extending the offer provided by the public sector** (e.g. legal aid points) to women who are in particularly difficult life situations;
- **Raising the competences of institution representatives and entities counteracting domestic violence, including the police;**
- **Establishing and supporting the functioning of institutions providing shelter to people experiencing domestic violence;**
- **Carrying out information activities on how to react and provide assistance to people experiencing violence;**
- **Providing financial support and obtaining external funds for the implementation of infertility treatment programs, including in vitro fertilization;**

**COUNTERACTING
THE DISCRIMINATION
OF SEXUAL AND
TRANSGENDER
MINORITIES**

- **Developing strategies, plans and recommendations to eliminate all forms of sexually motivated discrimination;**
- **Providing sex education;**
- **Organising and supporting shelter houses for LGBTiA + people in difficult life situations;**
- **Conducting social campaigns against discrimination and the use of violence against sexual minorities;**
- **Conducting educational and popularisation activities focused on counteracting and preventing all forms of discrimination,** including the use of local media, social networks and other mass media;
- **Organising visits of educators to schools** with the aim of increasing tolerance and countering the use of violence and victimisation based on gender and sexual orientation among children and adolescents.

Good practices from Polish cities participating in the “Action Plan for Cities”

Skarżysko-Kamienna

Skarżysko-Kamienna is the only town in the Świętokrzyskie Province where the President's Plenipotentiary for Equal Treatment has been appointed. This appointment took place in March 2021. In addition, the President of Skarżyska-Kamienna signed in October 2021, the European Charter of Equality between Women and Men in Local Life. Currently, the Plenipotentiary is developing the city's equality policy, which will be the city's official document. The purpose of the Plenipotentiary's work is to create equal development prospects for all city residents. The plenipotentiary reported the city's participation in the Human Rights Commission of the Association of Polish Cities, and after accepting the application, Skarżysko-Kamienna became part of it. Since then, the representative of the Mayor of the City has participated in cyclically organised meetings of the Committee. The aftermath of this was the inclusion of the Plenipotentiary of President Skarżysko into the expert team led by Anna Strzałkowska (Ph.D.), developing recommendations for cities in the field of

creating equality policies. Thus, Skarżysko-Kamienna began work on its own equality policy. The Equality Action Plan is based on the diagnosis of social inequalities in the city and the analysis of the equality situation in the city hall, subordinate units and in the local community. This analysis is supplemented by conclusions from consultations and meetings with the management of municipal units, representatives of non-governmental organisations and people reporting problems to the Mayor or his representatives.

Skarżysko-Kamienna was one of the first to treat the issue of gender equality as an extremely important topic and made it a priority, as evidenced by the appointment of the President's Plenipotentiary for Equal Treatment. Due to the development of the Equality Action Plan, the city will be able to share its experience gained in this area with other cities.

Ślupsk

The SDG 5, Gender equality in a European setting means, first and foremost, the elimination of all forms of violence against women and girls in the public and private spheres, including human trafficking, sexual exploitation and other forms of exploitation. It is also understood as an appreciation of unpaid care and home work (usually mothers) by providing public services, infrastructure, social protection and by promoting shared responsibility in the household and family. With regard to the public sphere, the gender equality postulate aims to enable women to fully and effectively participate in decision-making processes at all levels in political, economic and social life, and to ensure equal opportunities in fulfilling leadership functions.

The authorities of Ślupsk, as stated in the Development Strategy of the City of Ślupsk for 2017-2022, have implemented the postulate of gender equality under the slogan "Equal opportunities", which also applies to many other areas of social life, such as material and social status or disability. Ślupsk has taken steps to set equality standards, striving to implement the provisions of, inter alia, The European Social Charter, the Charter of Fundamental Rights of the European Union, the European Charter of Equality between Women and Men in Local Life and the Yogyakarta Principles.



GOAL 6 CLEAN WATER AND SANITATION

DEVELOPMENT DIRECTIONS

- **Balancing water management** – reducing the intensity of water abstraction and use;
- **Improving the efficiency of the use of water resources** by reducing and rationalising consumption;
- **Providing Universal access to water, sanitation and hygiene services;**
- **Increasing investments that improve access to water services,** reduce pollution and improve the quality of drinking water;
- **Increasing access to the water supply network, sewage infrastructure and water treatment plants;**
- **Increasing the available water resources;**
- **Reviewing environmental taxes and charges** to offset the cost of water services and sewage systems, including a cost-benefit analysis from the current exemptions from the fee for water abstraction;
- **Providing financial incentives** to reduce pollution and use water more efficiently;
- Enacting activities to jointly deliver water infrastructure and **reduce the fragmentation of the water supply and sewage sector in cities;**
- **Creating legal and financial mechanisms** favouring the rational use of water resources;
- **Implementing water-saving technologies in cities;**
- **Intensifying investments in the construction and modernisation of sewage treatment plants;**
- **Providing wastewater treatment in accordance with the requirements of the Council Directive of the European Communities** (Council Directive 91/271 / EEC of May 21, 1991 on urban wastewater treatment);
- **Improving the quality of surface and groundwater** in line with the requirements of the Water Framework Directive;
- **Increasing the share of surface waters in the water supply of residents;**

- **Managing rainwater, surface water and groundwater** in a sustainable manner that is integrated;
- **Increasing and supporting the participation of local communities** in improving water management and sanitary;
- **Protecting blue infrastructure areas in cities;**
- **Restoring rivers and watercourses**, as well as the health of ecosystems;
- **Protecting and restoring aquatic ecosystems**, including river valleys, wetlands, rivers, aquifers, lakes and others;
- **Ensuring the use of innovative, market-based solutions in the field of water distribution;**
- **Cooperating with local communities** to determine the types of water projects and programs to be implemented, the technologies used and the possibilities of their implementation and maintenance;
- **Conducting educational and popularising activities** concerning the methods of recycling, protection and reducing the consumption of water resources;
- **Developing strategies and plans to support and strengthen the participation of local communities in improving the efficiency of water management**, including the use of sanitary facilities;
- **Developing innovative solutions** aimed at maximizing the efficiency of water management and being an alternative to the traditional, costly and outdated sewage systems;
- **Increasing the number of people using improved wastewater treatment plants;**
- **Providing good management of urban water resources**, including the improvement of resource management, aimed at reducing conflicts related to the use of water for various applications (domestic, tourist and production consumption);
- **Enhancing water quality through measures to eliminate dumping and reduce pollution**, hazardous waste and illegal landfills, as well as to increase recycling and the recycling of waste;
- **Developing policies, strategies and guidelines** aimed at ensuring the efficient use of water resources in all sectors of the economy in the city;
- **Strengthening institutional programs and resources for coping with water scarcity**, especially in areas experiencing drought;
- **Implementing integrated water resource management at all levels;**

- **Enacting activity to intensify the collection, saving and storage of water**, including investments related to wastewater treatment and the use of recycling technologies and water reuse;
- **Monitoring and supervising water quality** and implementing regulations on pollution, sewage disposal and the spread of hazardous substances;
- **Supporting horizontal cooperation in water and environmental planning and policy** between municipalities and regions;
- **Adapting to new challenges and requirements related to climate warming** in planning urban infrastructure (e.g. weather anomalies and heavy rains).

PRIORITY TARGET GROUPS

- Water resources specialists
- Municipal Water and Sewerage Enterprises
- Operators of water supply systems
- Local and public administration
- Water sector institutions
- Municipal companies
- Scientific research institutions and universities
- Owners of single-family residential buildings
- Owners and managers of multi-family residential buildings
- Construction industry and construction workers
- Teachers and educators
- Non-governmental organisations
- Youth clubs
- Volunteers

MAIN AREAS OF ACTIVITY

- REDUCING WATER CONSUMPTION
- IMPROVING THE QUALITY OF DRINKING WATER AND INCREASING ACCESS TO WATER SERVICES
- IMPROVING THE QUALITY AND ECOLOGICAL CONDITION OF SURFACE AND UNDERGROUND WATERS
- INVESTING IN CONSTRUCTING AND MODERNISING WATER TREATMENT PLANTS

- ENACTING EDUCATIONAL AND POPULARISATION ACTIVITIES AIMED AT IMPROVING AWARENESS OF THE NECESSITY TO PROTECT WATER RESOURCES

Main areas of activity	Actions
<p>REDUCING WATER CONSUMPTION</p>	<ul style="list-style-type: none"> • Monitoring the consumption of water and water supply systems; • Cleaning up leaks and improving the efficiency of water systems; • Implementing various technologies focused on saving water; • Changing distribution practices aimed at saving resources; • Enhancing the use of “recycled water”, consisting in the re-use of water for living purposes, e.g. for irrigation of green areas, sports zones, for cleaning public spaces, roads, etc.; • Applying solutions that limit rainwater loss in circulation and reduce surface runoff in the city, e.g. by using permeable surfaces (retaining groundwater), collecting rainwater, using green roofs; • Using accumulated rainwater resources to maintain urban green infrastructure (watering flower beds and flushing roads); • Implementing investments related to the collection of rainwater (e.g. construction of large retention reservoirs, which will provide a significant part of the water demand in the city landscape and will reduce the dependence on treated water); • Establishing incentives for the private sector to collect water;

<p>IMPROVING THE QUALITY OF DRINKING WATER AND INCREASING ACCESS TO WATER SERVICES</p>	<ul style="list-style-type: none"> • Increasing investments to improve access to water services and the quality of drinking water, preceded by the identification of households without access to toilets and tap water; • Increasing the number of households connected to public wastewater treatment plants, water supply and sewage infrastructure; • Increasing the share of surface waters in the water supply of residents; • Implementing programs aimed at achieving equitable access to sanitary and hygienic services suitable for all residents, paying particular attention to the needs of women and girls as well as people in difficult life situations and at risk of exclusion; • Replacing outdated water systems in the city; • Protecting surface water intakes; • Increasing investment in research on water quality analysis; • Creating water supply plans and sanitation systems; • Implementing modern water treatment solutions • Promoting the use of sewage systems • Increasing the number and renovation of existing public toilets, including that in public institutions; • Maintaining existing water systems in the long term and designing new water systems using up to date best practices;
<p>IMPROVING THE QUALITY AND ECOLOGICAL CONDITION OF SURFACE AND UNDERGROUND WATERS</p>	<ul style="list-style-type: none"> • Initiating decisions based on measures to improve water status in cities and the results of multifaceted cause-effect analyses in the catchment area of the analysed waters (analysis of the catchment area consisting in the identification of causative factors of environmental changes, the pressures they generate, the state of the environment and the impact of pressure on the state of the environment); • Eliminating water pollution (e.g. by eliminating brine discharges from coal mines, limiting the use of salt for winter maintenance of roads or run-off from dispersed agricultural sources);

- **Eliminating/reducing pharmaceuticals and bioactive substances from waters and wastewater** (education towards reducing the use and disposal of pharmaceutical waste);
- **Creating integrated water system management systems in Poland's cities;**
- **'Re-naturising' river valleys and watercourses** (e.g. afforestation of riverside areas, protection of riverside wetlands and natural river banks, restoring morphological properties and natural dynamics of river flow, creating free-of-building strips surrounding watercourses, etc.);
- **Protecting urban reservoirs** (including blue urban infrastructure in spatial development plans, prohibiting the removal of water ecosystems from the city space);
- **Protecting and rejuvenating water reservoirs;**
- **Naturalising water reservoirs** (applying Nature Based Solutions - NBS) in the revitalisation of reservoirs in the city;
- **Providing effective rehabilitation of inner-city water reservoirs**
- **Implementing plans to prevent and reduce the risk of urban floods** (e.g. through effective management of rainwater runoff);
- **Coupling of flood prevention systems with drought prevention systems;**
- **Establishing water bottle filling stations** throughout the city to reduce the consumption of plastic bottles and to improve access to drinking water;
- **Implementing and popularising solutions limiting the generation of waste related to water consumption** (e.g. banning the sale of plastic bottles in municipal institutions, restaurants, enterprises, etc.);
- **Developing municipal interventions in the field of water infiltration** that reduces the risk of flooding;
- **Using natural waterways as drainage systems** in order to contribute to reducing the risk of flooding;

	<ul style="list-style-type: none"> • Developing specific plans for the protection and recovery of lost ecosystem values related to water management and production using water resources (forests, valleys, wetlands, rivers, etc.);
<p>INVESTING IN CONSTRUCTING AND MODERNISING WATER TREATMENT PLANTS</p>	<ul style="list-style-type: none"> • Modernising municipal water devices / facilities; • Supporting the development and transfer of green technologies in the area of water and sewage management; • Constructing new, three-stage sewage treatment plants; Expanding wastewater treatment plants and installing modernised technologies in wastewater treatment plants; • Developing water and wastewater management plans for individual facilities and buildings in the city; • Supporting the segregation, collection, transport and utilization of solid waste; • Supporting self-purification of surface waters;
<p>ENACTING EDUCATIONAL AND POPULARISATION ACTIVITIES AIMED AT IMPROVING THE AWARENESS OF THE NECESSITY TO PROTECT WATER RESOURCES</p>	<ul style="list-style-type: none"> • Organising interactive exhibitions on the use of less water and measures to reduce consumption; • Enacting information campaigns on the protection of water resources using the mass media; • Supplying educational materials on water resources; • Organising training workshops on various topics related to water; • Organising of other community water events; • Building networks of educators, water resources specialists, NGOs and water scientists; • Implementing promotion and training programs for the industrial and tourist sector on good practices for the reduction and effective use of water in production;

	<ul style="list-style-type: none">• Applying incentives to entities that adopt sustainable water management practices (e.g. certificates, subsidies, system of financial support, subsidies, etc.);• Enacting social campaigns promoting good water management practices (green roofs, rain gardens).
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Examples of initiatives in cities

Hidden rainwater. Construction of underground small and large retention reservoirs in Katowice

Place of implementation: Katowice; number of inhabitants: 290 553; population density: 1,764.7 people / km²; voivodship: śląskie

Project objective: rainwater management and its use to maintain green areas

Implementation period: 2017–2023 planned completion

Implementation cost: PLN 94 million

Changes in the nature of precipitation as a result of global warming require swift and decisive action and different ways of managing rainwater. In the past, this was quickly discharged to rivers through sewage to get rid of the risk of flooding and flooding. Currently, when the number of days without rainfall is increasing, but with high temperatures, storing rainwater and meltwater in the heart of our cities makes sense. Water retention in cities, at the site of precipitation, is an important need related to adaptation to climate change.

In Katowice, the impetus for the construction of underground storage reservoirs was the more frequent and intense rainfall alternating with periods of drought in today's weather patterns. For the rational management of water resources, a network of 25 storage reservoirs with a total capacity of 10,000 m³ is being built in the city. The project includes the construction, reconstruction, renovation and modernisation of the rainwater drainage network, as well as the construction of exits and road infrastructure related to the maintenance of tanks. The value of the investment is PLN 94 million. The stored rainwater will be used in green areas.

In Bogucki Park in Katowice, a dry river was created for the retention of rainwater in the park. During rainfall, the basin imitates a natural river-bed by being filled with water that with time, penetrates into the water storage tank located below it. The system has a capacity of 200 m³, and is equipped with an

automatic pumping system. The stored rainwater is used to water the plants inside the park.

Katowice also promotes the construction of small retention systems. As part of the action “We are catching rainwater”, the Municipal Housing Association in Katowice installed 19 tanks at the buildings it manages. Depending on the technical possibilities, the tanks have a capacity of 200 to 350 litres.

The stored rainwater significantly saves tap water by using rainwater for watering urban green areas, cleaning sewage systems, washing the surfaces of streets, squares and pavements.

Benefits:

Water storage for watering greenery, washing streets, reducing urban floods.

Sources:

<https://metropoliagzm.pl/2021/01/22/kolejne-zbiorniki-retencyjne-w-katowicach/>

https://inzynieria.com/wodyopadowe/gospodarowanie_wodami_opadowymi_i_roztopowymi/wiadomosci/60260,katowice-zbuduja-25-zbiornikow-retencyjnych

The oldest artificial water reservoir in Poland. Water reservoirs as an element of anthropogenic landscape transformation

Place of implementation: Tychy; number of inhabitants: 126 871; population density: 1,550.8 people / km²; voivodship: śląskie

Project objective: water reclamation, improvement and maintenance of water quality in Lake Paprocańskie

Implementation period: start of the project ~ 1710, maintenance of durability, change of use, adaptation of infrastructure to current needs to continue

The reservoir / Lake Paprocańskie is the oldest existing large dam reservoir in Poland, with an area of 105.1 ha and capacity of 1,457,000 m³. m³ and an average depth of 1.34 m. It was formed in areas after the exploitation of iron ore.

In over 300 years, the purpose of the facility has changed from being a water reservoir for driving the water wheels that set the bellows and hammers in motion in Huta Paprocka, through being a fish breeding pond, to

being a recreation and leisure area for the city of Tychy (population of nearly 127,000). Extremely valuable, from the point of view of blue-green infrastructure management, is the history of water management in this area, which can be traced on historical maps of the reservoir and its catchment area. The analysis of these documents shows the problems faced by the managers of past times. Noteworthy are the changes in damming the reservoir related to the change in water use, the construction of a treatment plant in Gostyń in 1867 to purify the waters flowing into the reservoir, shifting the Gostynia river bed and separating the river from the reservoir, and de-sludging of the reservoir in 1986–1992.

In 2009–2011, the areas around the reservoir were re-cultivated to create a public space for recreational use. In 2014, the promenade, the water playground and the canoeing marina of the Municipal Sports and Recreation Centre were completed. The author of both projects is Robert Skitek from the RS + studio in Tychy. The implementation of the project was awarded the title of the Best Public Space in the 7th Polish Architecture XXL plebiscite.

Currently, Lake Paprocańskie is a multifunctional reservoir with the following roles:

- offering flood protection of the south-eastern districts of the city of Tychy,
- being a place for water-related sports and recreation for the inhabitants of the city of Tychy, as well as for people coming to this place from the neighbouring communes and the Katowice agglomeration;
- providing active fishing management conducted by the District of the Polish Angling Association in Katowice - PZW Tychy.

There are numerous sports and recreational facilities around the reservoir - playgrounds, playgrounds for children, a small water playground, a rope park and a bicycle rental. Outdoor events and concerts are organised around the reservoir.

Benefits: Attractive public space, a place for recreation.

The 300-year history of the Paprocańskie Lake and the areas associated with it shows the complex nature of the process of using and maintaining the durability and functionality of such areas. It is an example of a space combining elements of the semi-natural landscape - aquatic and water-related ecosystems, forest - and cultural activities, which is marked by utility and tourist development investments.

Sources:

Absalon, D., Matysik, M., Woźnica, A., Łozowski, B., Jarosz, W., Ulańczyk, R., Babczyńska, A., & Pasierbiński, A. (2020). Multi-faceted environmental analysis to improve the quality of anthropogenic water reservoirs (Paprocany reservoir case study). *Sensors*

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GOAL 7 AFFORDABLE AND CLEAN ENERGY

LEGAL FOUNDATIONS

Communes are, on the one hand, places where people live and carry out various activities that use energy, and on the other hand, the field of operations of energy companies supplying electricity, heat and gaseous fuels to energy consumers.

In Poland, the first of the tasks of local governments, regulated by the Energy Law in Articles 18-20, related to the supply of electricity, heat and gaseous fuels, is its planning and organisation.

Local governments that actively use the powers resulting from the Energy Law since 1998, have created and updated the assumptions for the plans for the supply of electricity, heat and gas fuels and have then used these as the basis for generating agreements with energy supply companies. The draft assumptions specify:

- assessing the current state and expected changes in the demand for heat, electricity and gaseous fuels;
- introducing projects rationalising the use of heat, electricity and gaseous fuels;
- enabling the possibility of using or marketing the existing surplus and local resources of fuels and energy, including electricity and heat generated in renewable energy source installations, as well as electricity and utility heat generated via cogeneration and waste heat derived from industrial installations;
- implementing the possibility of applying energy efficiency improvement measures within the meaning of Art. 6 sec. 2 of the Act of May 20, 2016 on energy efficiency;
- enhancing the scope of cooperation with other communes.

The assumptions for such a plan are established by energy companies in their competence and by the self-government in relation to the entire area of the commune with regard to the activity of all energy producers and the requirements of all recipients.

In addition, the tasks of municipalities include:

- planning and financing of lighting located on the territory of the commune of public places, commune roads, powiat roads and voivodeship roads (with specific exceptions)

- planning and organisation of activities aimed at rationalising energy consumption and promoting of solutions reducing energy consumption in the commune;
- assessing the potential of electricity generation via high-efficiency cogeneration, as well as energy-efficient heating or cooling systems in the commune.

The municipality carries out these tasks in accordance with the local spatial development plan, and in the absence of such a plan - with the directions of development of the commune contained in the study of the conditions and directions of spatial development of the commune and the relevant air protection program adopted pursuant to Art. 91 of the Act of 27 April 2001 - Environmental Protection Law.

If the plans of energy enterprises do not ensure the implementation of the assumptions, a draft plan for supplying heat, electricity and gaseous fuels should be prepared for the area of the commune or its part. The draft plan is developed on the basis of the assumptions adopted by the council of this commune and should be consistent with it and should include proposals for the:

- development and modernisation of individual heat, electricity and gaseous fuel supply systems, along with the economic rationale;
- use of renewable energy sources and high-efficiency cogeneration;
- application of energy efficiency improvement measures within the meaning of Art. 6 sec. 2 of the Act of May 20, 2016 on energy efficiency;
- schedule of task execution;
- expected costs of implementing the proposed projects and the source of their financing;
- assessment of the potential of electricity generation via high-efficiency cogeneration and energy savings via energy-efficient heating or cooling systems in the commune.

The authors of the study published in 2019 by the Marshal's Office of the Silesian Voivodeship entitled "Energy planning. A guide for communes", write in the introduction:

"Local governments should adapt the proposed solutions to local conditions in the commune, using their own experience, taking into account the needs of the local community and the ecosystem. Let us remember that local energy planning mainly concerns man and his relationship with the world in

which he functions as one of many important elements. May these relations be the best.”

The above-mentioned directives and Polish legislation allow for the setting of various directions of development, which, in turn, should be consistent with the strategies and national plans related to the use of energy and reducing the emissions of the economy. The European Union’s current growth strategy is the European Green Deal, which aims to help transform the EU into a modern, resource-efficient and competitive economy:

- that will achieve zero net greenhouse gas emissions in 2050,
- where there will be a decoupling of economic growth from resource consumption,
- where no person or region is left behind.

In particular, the postulate of achieving climate neutrality of the European Union by 2050 requires, before making a decision to undertake investments, a deep reflection to what extent a given action contributes to the achievement of this goal and to what extent it meets the guidelines of the 2030 Agenda in the field of sustainable development. Among the directions of development set by the above strategies, the following can be distinguished:

- **Promoting the use of renewable energy sources** as close as possible to the place of energy consumption, and providing inexpensive, reliable and modern energy services to all types of energy recipients;
- **Improving the efficiency of energy use** in buildings of any purpose, within the urban infrastructure and any form of transport utilised in the area of the commune;
- **Limiting CO2 emissions to the atmosphere** by removing coal furnaces in each facility, and ultimately eliminating heat sources using fossil fuels (including natural gas) and converting these to renewable energy sources
- **Developing smart electricity networks**, allowing operators to modulate electricity demand during peak periods and to reduce consumption by increasing consumer awareness;
- **Creating incentive mechanisms, including financial, for the use of renewable energy sources**, improving energy efficiency, taking into account the entities of the energy sector;

- **Developing distributed energy networks**, generating electricity and heat for the needs of local communities through the use of renewable sources;
- **Creating conditions for internal legal and administrative regulations** allowing for the development of local energy sustainable areas;
- **Constructing/expanding infrastructure** for the production of electricity and heat from alternative energy sources – providing municipal investments in renewable energy sources;
- **Investing in research into renewable energy sources** and extending support to research and development in the field of green technologies;
- **Promoting green solutions in major urban sectors** (renewable energy, LED lighting, green transport and electric cars, green buildings, green services, green IT, urban resource circulation);
- **Creating municipal energy strategies** to develop ways to reduce energy consumption, improve energy efficiency, increase the share of renewable energy use and reduce energy poverty;
- **Raising public awareness of sustainable energy sources** and encouraging local communities to participate in the creation of infrastructure projects;
- **Improving energy management** by introducing measurement and control systems for energy consumption by all recipients, collecting and analysing data with the use of specialised IT software for the purpose of on-going optimisation of energy consumption and identification of technical and economic potentials for reducing energy demand;
- **In estimating investment costs, taking into account impact on the environment and the lifetime cost of their elements;**
- **Creating systems ensuring the possibility of investing in own energy** – as generated directly by cities and their inhabitants. In particular, the development and operation of cooperative (collective) renewable energy production and energy storage infrastructure;
- **Investing in green city projects** - from green buildings (offices, schools, museums, public facilities) to eco-mobility, which reduces energy consumption in everyday activities (e.g. switching to clean fuels, encouraging people to use bikes or to walk, buying smaller and more efficient vehicles);
- **Conducting educational and popularisation activities** in order to minimise the use of means of transport based on fossil fuels and the use of alternative energy sources.

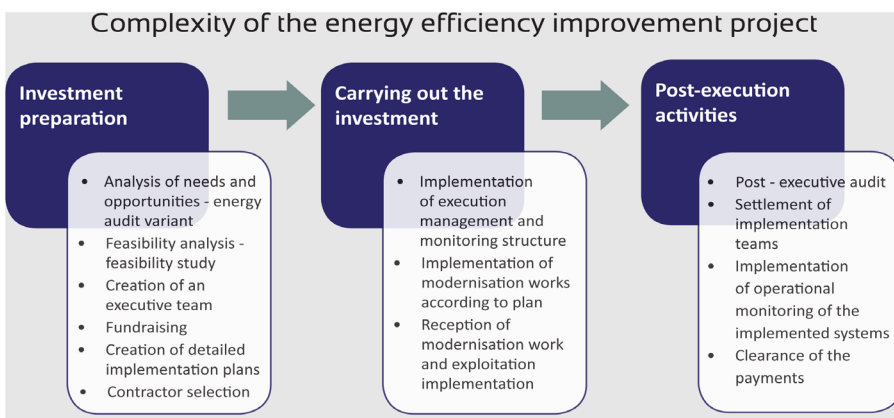
PRIORITY TARGET GROUPS

Strategies, plans and actions always require defining who will prepare and implement them. The following list covers the basic groups.

- Renewable energy experts
- Officials
- Local and public administration
- Institutions of the energy sector
- Municipal companies
- Scientific institution
- Universities
- Non-governmental organisations
- Youth Clubs
- Owners of single-family residential buildings
- Owners and managers of multi-family residential buildings
- Property managers

MAIN AREAS OF ACTIVITY

Activities aimed at achieving energy neutrality can be divided into investment and non-investment activities.



In the case of investment activities, the complexity of the process of their preparation and implementation should be taken into account:

In the cities of the European Union countries, the organisational formula called one-stop-shop (OSS) is used more and more often, and corresponds roughly to the definition of a substitute investor. Regional and city governments use various business models to create it and employ the available organisational and legal forms.

From the point of view of preparing energy projects in an urbanised environment, it is important to use the increasingly available support instrument from the EU ELENA program, which allows for reimbursement of up to 95% of all costs related to bringing the project to the contractor selection phase in a conventional tender and in the PPP formula (energy audits, design documentation, legal, financial and technical consultancy, preparation of PPP and PPP proceedings). The above issues are currently discussed at the national and regional level at the Round Tables for Financing Sustainable Investments as part of the H2020 RoundBaltic project: <https://sape.org.pl/roundbaltic/> .

The non-investment projects concern the remaining activities related to the overarching goal, i.e. those affecting the awareness of energy users, education and others.

The following breakdown of the business areas according to specific objectives is considered.

- IMPROVING ACCESS AND INCREASING THE USE OF ALTERNATIVE ENERGY SOURCES IN CITIES
- SUPPORTING THE USE OF RENEWABLE ENERGY SOURCES IN URBAN AND OTHER PROPERTY RESOURCES, WHETHER ADVISORY or
- FINANCIAL
- RESTRICTING THE USE OF HIGH-EMISSION FUELS AND HEATING INSTALLATIONS
- IMPROVING ENERGY EFFICIENCY

Main areas of activity	Actions
<p>IMPROVING ACCESS AND INCREASING THE USE OF ALTERNATIVE ENERGY SOURCES IN CITIES</p>	<p>NON-INVESTMENT:</p> <ul style="list-style-type: none"> • Developing comprehensive city strategies to achieve climate neutrality by 2050; • Developing communal assumptions for supply plans into heat, electricity and gaseous fuels; • Referring to climate neutrality in urban planning and urban planning policies, including urban regeneration; • Developing educational strategies to minimise the use of fossil fuel-based transport and to increase the use of alternative energy sources; • Introducing energy saving and emission reduction criteria in purchasing practices and encouraging the use of renewable energy sources; <p>INVESTMENT:</p> <ul style="list-style-type: none"> • In favourable conditions, making use of thermal waters, which will be initiated by obtaining support for the performance of geological works and works related to the exploration and recognition of deposits in order to make them available; • Developing intelligent networks of low-emission energy sources, including the use of intelligent systems for connecting to mini-grids in construction and transport, which can be used as “batteries”, hence, increasing energy efficiency and energy distribution; • Constructing modern photovoltaic systems with energy storage technology and including electric vehicle charging stations in buildings of any purpose; • Placing new low-capacity wind farms within the city; • Making use of source gas from biomass fermentation; • Constructing municipal photovoltaic farms, connecting these to the grid, and introducing into the grid system, energy storage battery systems; • In favourable ecological conditions, commissioning low output hydropower plants in river systems and connecting these into integrated intelligent transmission networks;

<p>SUPPORTING THE USE OF RENEWABLE ENERGY SOURCES IN URBAN AND OTHER PROPERTY RESOURCES</p>	<p>ADVISORY SUPPORT:</p> <ul style="list-style-type: none"> • Organising one-stop-shop function at the city level in a form accessible to all users of public and non-public energy; • Obtaining consultation for developing prosumer energy – obtaining help in organising energy communities; • Disseminating information on available public financing instruments for the construction of renewable energy sources; • Introducing measurement and control systems for energy consumption by all consumers, collecting data and analysing them with the use of specialised IT software in order to optimise energy consumption on an on-going basis and identify technical and economic potentials for reducing energy demand, emissions and introducing renewable energy sources; <p>FINANCIAL ASSISTANCE:</p> <ul style="list-style-type: none"> • Creating municipal financing programs for the use of alternative energy sources; • Introducing financial incentives encouraging pro-collegial changes (e.g. a fee for entering the city centre or tax breaks for using green energy);
<p>RESTRICTING THE USE OF HIGH-EMISSION FUELS AND HEATING INSTALLATIONS</p>	<p>NON-INVESTMENT:</p> <ul style="list-style-type: none"> • Introducing restrictions in the operation of installations in the city, which burn poor quality fuels, as well as high-emission heating sources (legislative and organisational regulations); • Reducing electricity consumption by increasing consumer awareness through educational activities and popularising; • Educating the public on the use of alternative-ecological solutions by residents and energy-saving habits; • Developing urban concepts and area regeneration programs in order to achieve climate neutrality; • Promoting the results of research on the improvement of the efficiency of the use of energy contained in less polluting fuels;

	<p>INVESTMENT:</p> <ul style="list-style-type: none"> • Developing and promoting ecological solutions in urban sectors, among others, renewable energy, LED, ecological transport, electric cars, green buildings, ecological services, IT and urban resource circulation; • Replacing solid fuel-fired boilers with renewable energy sources, including heat pumps; • Covering energy poor households with investments using the STOP-SMOG program; • Introducing projects supporting the acquisition of electricity and heat from solar radiation for household needs;;
<p>IMPROVING ENERGY EFFICIENCY</p>	<p>NON-INVESTMENT:</p> <ul style="list-style-type: none"> • Preparing and implementing the PN-EN ISO 50001 energy management standard in the commune, including: <ul style="list-style-type: none"> – Undertaking an inventory of all energy consumption, introducing permanent monitoring combined with the active possibility of remote control; – Establishing an energy management department; – Preparing energy balances providing information on final energy demand and primary and greenhouse gas emissions in individual sectors of the economy; – Identifying the potential for improving the efficiency of energy use with the use of energy audits and analyses from the energy consumption monitoring system; – Developing a municipal energy management policy for all sectors and all types of owners; • Implementing the requirement of designing the construction and modernisation of municipal buildings and revitalisation areas and their surroundings towards climate neutrality; • Developing guidelines for the efficient use of energy in buildings of any purpose;

	<p>INVESTMENT:</p> <ul style="list-style-type: none">• Introducing electric scooters and e-scooters to cities, supported by simple, free applications that will be affordable for residents;• Undertaking the thermomodernisation of buildings of any purpose to the almost zero energy standard with the use of available sources of financing;• Introducing low-emission means of public transport;• Organising scooter and / or hybrid car rentals from green energy suppliers, preferably from the municipal energy company.
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Examples of initiatives undertaking in Poland's cities

Implementing an energy management system in selected buildings of the city of Katowice

https://www.silesia.org.pl/upload/files/Natalia/prezentacja_zarzadzanie-UM-Katowice_v2_MOLOC.pptx

A system for monitoring and providing optimal control of energy and water consumption in municipal buildings was implemented by the Katowice local government. The solution is already operating in 61 public buildings in the city, and ultimately in 2024, there will be 74 of them¹

The project “Energy and water monitoring system with control options in public utility buildings of the city of Katowice (SMiS) “ is being put in place over a period of four years, with two main steps of activation. The first is the implementation and commissioning of a central IT system this year. The second is the expansion of the system in 2022-24. - Ultimately, in 2024, the system will cover 71 public buildings.

The first stage included the delivery of central IT system software using the control and measurement automation installed in the buildings. At this stage,

¹ <https://katowice.tvp.pl/57136326/katowice-wdrazaja-monitoring-wykorzystania-energii-i-wody-w-miejskich-budynkach> [dostęp 10.10.2021].

the buildings were also retrofitted in the scope of enabling so-called building control, and local system operator stations were launched in the municipal energy management office.

The second phase will mainly involve an external company providing on-going monitoring services and building control through the implemented system, as well as the provision of an update service and expansion of the system with new functionalities, along with the visualisation of measurements in real time. From the beginning of 2022, part of the system's visualisation will be available via the website: <https://www.katowice.eu/dla-mieszka%C5%84ca/miejskie-centrum-energii>

The launch of the system was preceded by several years of preparation in the field of design and implementation of control and measurement automation elements. It includes, among others, electric energy meters, thermal energy meters, water meters, heat node regulators, air handling unit regulators, boiler room regulators and additional air parameter sensors in buildings.

Energy modernisation of public utility buildings in Płock in the PPP formula

<https://www.ppp.gov.pl/modernizacja-energetyczna-objektow-uzytecznoscipublicznej-w-plocku/>

The investment covers the design, construction and maintenance of comprehensive energy modernisation of 27 public utility buildings in Płock, and is aimed at reducing the costs of heat and electricity consumption.

The Private Partner undertook, throughout the duration of the PPP contract, to provide financing for the project, i.e. to cover the costs of design works, construction works, purchase, installation and servicing of renewable energy sources, energy management and removal of failures resulting from the maintenance of the facilities in the scope of the modernisation.

The funds for the Private Partner's remuneration come entirely from the savings generated as a result of the energy modernisation carried out. The Public Entity does not provide for other payments to the Private Partner.

The PPP contract was signed with the contractor in November 2015 and the contract expires in August 2033.

Good practices from Polish cities participating in the “Action Plan for Cities”

Konin

The energy and economic transformation, the development of renewable energy - including the use of hydrogen and geothermal waters for energy production, is the chronologically first goal of the New Path of City Development. The implementation of this course of action has already been initiated:

- an energy cluster was created in the city - Zielona Energia Konin,
- the Wielkopolska Energy Valley brand was developed,
- intensive activities are carried out as part of the Wielkopolska Hydrogen Platform, focused on the effective acquisition of EU funds from the Just Transition Fund,
- co-financing was obtained and a geothermal heating plant is being built that will be commissioned by the end of 2022,
- the bus fleet was replaced with low-emission electric and hybrid vehicles, and, in the future, hydrogen-fueled buses will be acquired,
- co-financing was obtained and the energy modernisation of municipal buildings commenced.



Photo 8. Energy cluster. Source: <https://pwik-konin.com.pl/klaster-energii/> [accessed: 21.12.2021]

Energy Transformation, Healthy Balance and Creativity Generator are the three goals of complementary and mutually reinforcing activities that will transform Konin into a thriving, healthy and entrepreneurial city. This will be a city noted for modern, human and environment-friendly technologies, interpersonal relations and creativity, and a city where the energy of people is combined with the energy of Nature.

The implemented projects contribute to sustainable development, increase awareness among residents about the new vision of Konin as a Green City of Energy, and contribute to the development of energy specialisation. In Konin, this has been facilitated due to the existing staff potential and specialised vocational education. In addition, thanks to the creation of the Green Energy Konin Energy Cluster, the implementation of the strategic goal of decarbonising the economy is quite feasible.

The Water and Sewerage Company Ltd. in Konin, taking into account the changing market conditions and the increasing purchase prices of electricity, was the initiator of the creation of the energy cluster. Thanks to the efforts of the company and the authorities of the City of Konin, on June 21, 2018, an agreement was signed establishing the “Energy Cluster – Green Energy Konin”. The parties to the agreement were the City of Konin, 3 municipal companies and the Centre for Research and Development of Technologies for Industry S.A. This event was the beginning of the road leading to Konin’s investment in renewable energy.

The created Energy Cluster “Green Energy - Konin” aims to integrate the potentials and entities related to the energy market, in particular, with the RES market and energy management by creating a cooperation network of entities for changes in the field of low-emission and sustainable energy economy. Cooperation within the Cluster will support the tasks that would be difficult or impossible to perform independently by entities participating in the Cluster. The success of this project will increase the energy security of the city of Konin and create new development opportunities.

The result of the operation of the “Zielona Energia Konina” energy cluster is primarily a surplus of energy produced from own sources over the needs of the municipal sector. Through changes in the law, this can be allocated to cover the energy demand of other economic entities in the city and residents.

Końskie

In the case of Końskie, the implementation of the SDG 7 consists mainly in increasing the share of renewable energy sources in the city’s general energy

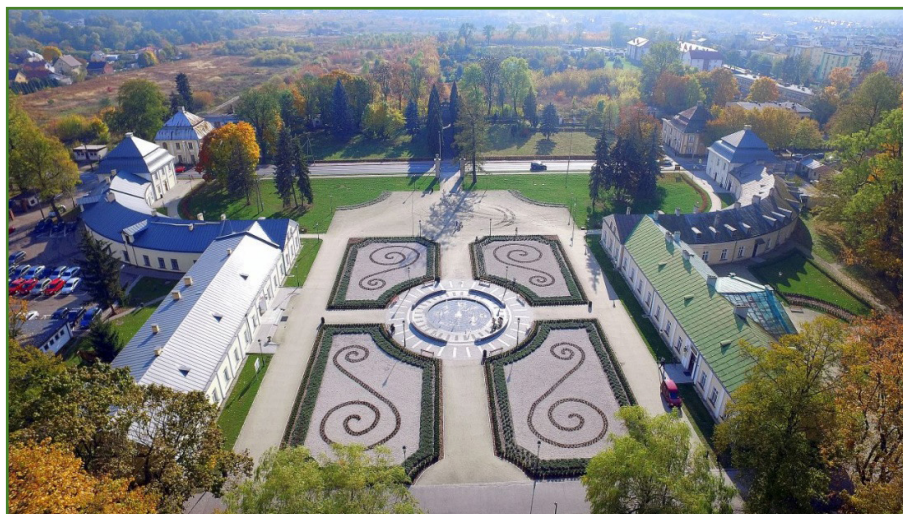


Photo 9. Thermal modernisation of the palace complex, currently Town Hall in Końskie. Source: Dariusz Kowalczyk

balance and increasing the energy consumption efficiency index. This objective also includes gaining access to clean energy research and technologies in the fields of renewable energy, energy efficiency and advanced and cleaner fossil fuel technologies. As part of this goal, state and local government units have been tasked with developing energy infrastructure and clean energy technologies.

The city and commune of Końskie, like other cities in Poland, struggles with the problem of air pollution mainly during the heating season. Usually, the introduction of pollutants is from chimneys of a low height, which causes the pollutants to accumulate around the site of origin. Surface emission also includes the emission of pollutants from landfills and sewage treatment plants. In the area of the Konskie commune, the following measures have been taken to improve the energy efficiency of buildings and heating systems:

- investments carried out under the Environmental Protection Program for the City and Commune of Końskie for 2017-2020 with a perspective until 2024, including: thermal modernisation of multi-family buildings; introducing more modern technologies that ensure lower energy consumption in public facilities, as well as their comprehensive thermal modernisation; changing heat sources and introducing the use of renewable energy – infrastructure affected includes: DPS building, ZSP No. 3 in Końskie, ZOZ in Końskie, SOSW in Barycz, M-GOK in Końskie, WDK in Kornica and other facilities in the commune; heat source replacement by residents of individual households,

- as part of the KAWKA program, a total of 189 ineffective solid fuel stoves in single-family houses were replaced with more efficient gas installations and those using renewable sources,
- 444 applications for the replacement of the heating source were submitted to the Clean Air program (including: approx. 62% for boiler rooms or a gas boiler, 17% for biomass and wood pellets, 16% for a heat pump, others for coal and electricity),
- The Municipal Economy Enterprise completed several green projects: construction of an energy-efficient social and administrative building with a photovoltaic installation with a capacity of 39.76 kWp with 2 heat pumps and the construction of a photovoltaic installation with an installed capacity of 627.20 kWp on the reclaimed landfill,
- installation of 427 renewable energy installations for individual farms as part of the Staropolski Association of Municipalities and Cities and the construction of numerous micro-installations, mainly photovoltaic and solar, without co-financing,
- Creation of several renewable energy installations by private enterprises: a photovoltaic installation with a capacity of 999.18 kW in Końskie – District Dairy Cooperative, a photovoltaic installation with a capacity of approx. 1 MW in Kopaniny – Sunny Farm Sp. z o.o. and a small-scale hydropower plant (SHP) with a capacity of 12 kW in Piła. Other investments in progress include: photovoltaic farms with a capacity of up to 7 MW and a capacity of up to 45 MW in Kornica, photovoltaic farms with a capacity of up to 1 MW in Trzemoszna and farms with a capacity of up to 2 MW in Pomorzany;
- investments of the Municipal Heating Company in Końskie: modernisation of K1 and K3 boiler houses - replacement of boilers with new units, construction of a gas boiler room with a capacity of 8.4 MW, reconstruction of the heating network and connections, installation of exchanger nodes, thermal modernisation of buildings belonging to PEC;
- PEC research projects: analysis of the technical possibilities of cooperation between the Pyrogenetic Waste Treatment technology and the heating system (cooperation with Commergy ConVert Sp.z o.o.); analysis of the directions of modernisation of existing equipment and construction of new sources in a biomass or RDF heating plant (the project is to be implemented and financed by the Ministry of Economy, Trade and Industry of Japan METI and the Central Energy Office of Japan JCOAL); analysis of possible directions for the modernisation of heat sources in the ELENA program (KAPE Sp.z o.o. in Warsaw), participation in the 1st stage of two competitions organised by

the National Centre for Research and Development – Power Heat of Future, i.e. a heating system from RES and a CHP plant in the local energy system.

As part of its statutory activities, the City and Commune Hall of Końskie also undertakes the following tasks: promoting the development of renewable energy (information campaigns) and conducting environmental education in the field of climate protection and air quality. The complexity and multifaceted nature of the activities carried out in Końskie mean that its activity can be treated as good practice.

Krosno

In the case of Krosno, a good practice is the establishment of the Krosno Energy Cluster at the end of 2021. In the scale of 2021, Krosno Holding Komunalny produced 11,514 MWh and consumed 11,181 MWh. The achieved result is expected to be even better in the future. The energy balance of Krośnieński Holding Komunalny for 2021 shows that the Company produces more electricity than it consumes per year. In 2021, energy production amounted to 11,514 MWh and consumption was 11,181 MWh. Thanks to the ongoing investments and construction of new installations, the achieved result will be even better in the future. The founders of the Cluster were:

- Krosno City Commune - represented by the Mayor of Krosno, Mr. Piotr Przytocki;



Photo 10. Photovoltaic installation built on the site of the reclaimed landfill in Krosno. Źródło: MPGK Krośnieński Municipal Holding

- Krośnieński Holding Komunalny (Cluster Coordinator) – represented by the President of the Management Board of the Company, Mr. Janusz Fic;
- Carpathian State University in Krosno – represented by the Rector, dr hab. Zbigniew Barabasz, prof. CSU.

Electricity production is closely related to the self-consumption system operating in Krośnieński Municipal Holding. This means that the Company maximises the energy consumption for its own needs, which it produces from its own sources.

The largest amount of energy was produced by the Company in a biomass heat and power plant, i.e. nearly 8.3 thous. MWh, which accounts for 72% of the total energy produced, while 21% of the total energy was derived from photovoltaic installations 579 MWh, i.e. 5%, and the share of the Sieniawa hydropower plant in energy production was 231 MWh, i.e. 2% of the total energy produced by the Company in 2021.

The largest energy production was recorded in the fall and winter months, i.e. in October or November last year, when the ORC turbine was working dynamically. The electricity produced by the Company in its entirety is so-called ‘green energy’ and is based on renewable energy sources.

Both the City of Krosno Commune and MPGK Krośnieński Municipal Holding put emphasis on the development of RES production in Krosno. Currently, MPGK has 10 PV installations with a total production capacity of 3445 kW, and another 5 photovoltaic installations are under construction. They are located at the Regional Waste Recovery Centre in Krosno, the sewage treatment plant, the “Wisłok” Water Treatment Plant in Sieniawa and at the Company’s base at ul. Fredry in Krosno. Their total capacity will be approx. 600 kW, and further PV investments are in the design phase.

The energy produced in own RES installations is also used to charge MPGK electric cars. In 2021, the Company purchased 4 cars for the needs of the Holding.

Sieradz

Energy security, energy independence and the use of Sieradz’s endogenous potentials are the basic assumptions of the local municipal policy in pursuit of the goal of a self-sufficient city. To this end, the City of Sieradz implements a number of programs and projects aimed directly at children (mainly environmental education), adult city residents (investment programs in renewable energy sources) and public local government institutions (investments in

renewable energy sources), but in the next 10 years, it intends to set a comprehensive goal – energy self-sufficiency (strategic programs).

These assumptions concern both future safety in the field of, for example, district heating, implemented through the construction of a geothermal and biomass heating plant with an injection well and the construction of a cogeneration module supporting the operation of the heating plant, as well as safety in the field of electricity based on the construction of a municipal energy cluster in the future. These will be final investments in the adopted municipal policy set out in the Development Strategy of the City of Sieradz until 2030.

The first steps to energy independence are smaller projects initiated, coordinated and co-implemented by the City of Sieradz. The project that distinguishes Sieradz from similar urban centres is that entitled “Installation of photovoltaic installations on public utility buildings in Sieradz – stage 1”, the aim of which is to improve the energy efficiency of public utility buildings – in 7 kindergartens in Sieradz – in order to reduce the amount of pollutants into the atmosphere. Ultimately, this program will also cover primary schools and local government institutions in the later stages. The assumed goal of the project is to increase the production of energy from renewable sources, improve the condition of the natural environment by reducing the emission of pollutants into the atmosphere, reduce the use of traditional energy sources through the employment of renewable energy sources, save natural resources through the use of renewable energy sources, improve the health conditions of the region’s inhabitants by reducing the emission of pollutants into the atmosphere, and increase public awareness of the need to protect Nature and its resources. The city plays an important role in the project and through its facilities, promotes the benefits of renewable energy and their direct impact on improving the quality of life in the city.

Świdnica

The climate neutrality goals adopted by Poland show that by 2050 the thermal needs of all households are to be covered by municipal heating systems and zero- or low-emission individual sources. In recent years, there has been a growing interest in the use of renewable energy sources (RES), which, in addition to environmental benefits related to the reduction of gas emissions, bring economic benefits, ensure energy security and diversify energy production sources. Currently, in covering the heating needs in Świdnica, renewable energy systems play only a minor role, and are mainly employed as a supplementary source to cover a part of the demand for the preparation of domestic

hot water in some industrial and service facilities and in certain individual housing developments. The thermal needs of residential buildings in the city of Świdnica are satisfied mainly through the district heating system. The second largest sources of heat in the residential sector are coal-fired boiler houses and stoves, which cover the thermal needs of approx. 38.2% of all domiciles, while the remaining 12.5% are heated individually from network gas (Municipal Heating Company data).

Świdnica, currently a city where air pollution indicators are commonly exceeded, intends to become a zero-emission centre by 2030, as all high-emission heat sources will be replaced, the energy efficiency of buildings will be enhanced and the share of renewable energy sources in the overall energy market balance will increase. In addition, the thermal modernisation of public utility buildings managed by the City will be continued, while the knowledge and awareness of energy users in terms of energy efficiency in various recipient sectors, e.g. in individual transport and households, will increase.

The reduction of low emissions and the fight for clean air in Świdnica will be implemented in the long term on the basis of individual projects, which remain one of the main areas of financial support for the city. The decision to implement them is made each time based on the financial situation of the city and the availability of external sources of financing from own, national, EU and international funds.

Since 2013, the commune of the City of Świdnica has been actively involved in the elimination of low chimney emissions in the city, which translates into specific effects:

- from 2013 to 2021, 2,200 high-emission heat sources were eliminated;
- in 2021, alone, 296 high emission furnaces were replaced.

Therefore, as a result of activities undertaken by the City in 2013-2021, the emission of suspended dusts was reduced by over 12.14 tons in the case of PM 10, over 11.5 tons in the case of PM 2.5, and CO₂ emissions to the atmosphere were reduced by over 53.08 tonnes of CO₂ eq. per year. In 2021, the environmental effect was: PM 10 - over 1.46 Mg / year, PM 2.5 - over 1.46 Mg / year, CO₂ - over 2.93 Mg / year.

Activities related to air and climate protection have been carried out in Świdnica for a long time – as evidenced by the adopted programs and implemented projects:

- The project entitled “Change of heating method in municipal buildings in Świdnica”, carried out as part of the ROP WD for the years 2014 - 2020. The project resulted in the elimination of 73 solid fuel furnaces in 10 municipal

buildings, which reduced the annual emission of greenhouse gases and suspended dust;

- The project entitled “Reduction of low surface emission in Świdnica by elimination of coal-fired local heat sources and connection of facilities to the extensive heating network” was financed by the KAWKA 2 Program. The project resulted in connecting 88 buildings to the municipal heating network and the elimination of 762 individual furnaces;
- The project entitled “Construction of an internal central heating installation in residential premises and utility rooms, as well as common parts in multi-family buildings at the following streets: Jodłowa 3, Wodna 32, 34, 36 in Świdnica”. The task was implemented in 2019/2020 from the city budget. These were buildings pre-qualified for the KAWKA II program and not connected previously to the municipal heating network due to lack of funds. As a result of the task, 4 buildings, i.e. 10 premises, have been connected and 15 solid-fuel furnaces were removed;
- The project entitled “Construction of an internal central heating installation in residential premises in multi-family buildings at Teatralna street 38, Walerian Łukasiński street 5-5A “. Task implemented in 2020 from the city budget. These were buildings pre-qualified for the KAWKA II program and not connected to the municipal heating network previously due to lack of funds. As a result of the implementation of the task, 2 buildings, i.e. 12 premises, were brought into the network and 22 coal-fired furnaces were eliminated.

In addition, intensive thermal modernisation works are carried out in public utility buildings and residential buildings in Świdnica. Completed actions, among others, include:

- The project entitled “Renovation of municipal multi-family buildings situated at Gdynia street 3-3A; 1st May street 3; Stefan Żeromskiego street 6; Spółdzielcza street 29-31; Kotlarska street 5A in Świdnica ”, co-financed under the ROP WD, Axis 6 Infrastructure of social cohesion, which consisted in the revitalisation of municipal buildings;
- The project entitled “Renovation of municipal multi-family buildings situated at Passer street 3; Passer street 5; Passer street 6; Przechodnia street 8; Passer street 10; Teatralna street 25 in Świdnica”, co-financed under the ROP WD, Axis 6 Infrastructure of social cohesion, which consisted in the revitalisation of municipal buildings;
- The project entitled “Thermomodernisation of public utility buildings - Primary School No. 4 in Świdnica”, under which modernisation of building

partitions, replacement of the joinery, modernisation of the domestic hot water installation; modernisation of the heating installation; replacement of lighting systems with energy-saving LEDs occurred;

- - The project entitled “Thermomodernisation and reconstruction of the building at Franciszkańska 7 street”.
- As part of the investment task, in 2021, construction and finishing works were carried out consisting of the renovation of the roof covering (with the replacement of structural elements and thermal insulation of the roof), replacement of the door joinery, wall replastering and painting, and introducing suspended ceilings. The tele-informatic, electric and low-voltage networks were also replaced. The investment was financed from funds under the non-returnable support of the Governmental Fund for Local Investments (COVID-19 fund).

The city also encourages care for air quality through campaigns such as e.g. “We warm up wisely”, as preparing the local community for new environmental challenges requires providing increased information and education activities. Moreover, in the matter of informing the local community on the need to implement the goals of sustainable development, Świdnica has established cooperation with the United Nations Association – Poland. The city also intends to organise meetings, debates, competitions and field games promoting environmental ideas in the city. As the implementation of the goals of sustainable development requires taking actions securing the needs of the present and future generations, an important part of the initiative include educational activities increasing environmental awareness, as well as promoting pro-ecological attitudes and a sense of responsibility for the state of the environment in terms of improving energy efficiency, saving natural resources and reducing low emissions. Świdnica has also signed the Declaration of Local Governments of the Wałbrzych Subregion Decarbonization 2030. This initiative assumes that heat and energy in this area should only come from renewable sources. By using the support of the Just Transition Fund, other sources of external funds and their own budgetary resources, local government officials are getting ready to implement the decarbonisation program, the common denominators of which are protecting Nature and countering climate change.

Wałbrzych

The city does not have its own electricity sources and is powered from the nationwide electricity grid. In multi-family buildings, 75% of all heating

needs are covered by mixed fuels (coal, gas, electricity) - only slightly more than 18% of all heat comes from district heating networks. Its further development is planned, but the field conditions increase the costs and hinder investments. Moreover, the large share of individual buildings additionally reduces the profitability of the investment. In the case of preparation of domestic hot water, the use of gas stoves, electric boilers, central heating boilers and mixed sources is more sustainable - 38%, 26%, 16% and 16%, respectively.

The above data indicate that fossil fuels have a significant share in the structure of heat consumption for heating - which is typical for Polish cities. Moreover, the consumption of electricity in the city and, in particular, for heating, remains at a relatively high level due to the low social awareness of the effects and costs of energy use and the lack of thermal modernisation of buildings. While most buildings belonging to the city have undergone modernisation, many single-family or private buildings have still not been subjected to thermal modernisation. The main reason for this is the low ecological social awareness of the need for thermal modernisation and the costs of such investments. The situation is also complicated by the advanced age of the buildings, which are often supervised by the conservator of monuments, which makes it difficult and increases the costs of possible thermal modernisation works.

Due to the described conditions, the phenomenon of low chimney emission is a significant problem in the city (the permissible amount of suspended dust PM10 and PM2.5 and benzo (a) pyrene, arsenic and ozone are commonly exceeded), as is poverty, including energy poverty.

The exposure to climate change and violent atmospheric phenomena is related to the city's location and its existing development, including exposure to strong winds and high temperature amplitudes throughout the year. The channelling of the Pełcznica river and its tributaries is the cause of rapid water runoff from built-up areas. The old city infrastructure and buildings are especially vulnerable to climate risks. Moreover, poor soil quality and groundwater depression determine greater susceptibility to drought. Still, the presence of green areas limits the areas susceptible to the formation of heat islands to the city centre - to Podzamcze and Piaskowa Góra. In addition, the city actively implements projects of deep thermal modernisation of buildings, construction of bicycle paths, increasing the share of public transport and others that contribute to building better resilience and to limiting the impact on the climate, while improving the well-being of the city's inhabitants.

The city undertakes numerous activities related to efforts to reduce greenhouse gas emissions. The city encourages participation in national programs that support the improvement of energy efficiency, e.g. the Clean Air Priority



Photo 11 and 12. Modernisation of the tenement house at Moniuszko street No. 31 in Wałbrzych. Source: City Hall in Wałbrzych.

Program. Since 2014, the city has had a resolution on co-financing the replacement of heat sources. Each year, own funds are allocated for this purpose. In some years, the City has additionally benefited from the Regional Fund for Environmental Protection (loan) and EIB (loan) funds. In 2015, the Low-Emission Economy Plan for 2014-2020 with a perspective until 2030 was adopted. This involves reduction of greenhouse gas emissions, increase in the share of energy from renewable sources and reduction of energy consumption. By the regulation No. 105/2015 of the President of Wałbrzych of February 3, 2015, the “Green Energy in Wałbrzych” Team was established. The aim of the Team’s work is to prepare the city’s energy self-sufficiency assumptions based on renewable energy sources, with the use of former mine facilities for the production and storage of electricity and heat.

On November 20, 2017, a cooperation agreement was signed to create the Wałbrzych Energy Cluster, which was certified by the Ministry of Energy in the second edition of the competition. The Wałbrzych Energy Cluster is an agreement concluded between local government units, research and scientific units, entrepreneurs and institutions supporting the development of renewable energy sources and promoting the ideas of environmental protection. Wałbrzych Cluster of Energy has applied for co-financing of the construction of a photovoltaic farm under the Regional Operational Program for the amount of PLN 15 billion, of which co-financing in the form of a subsidy is PLN 6.56 million. The farm will be built at the Regional Municipal Waste Processing Installation.

In 2020, the region's authorities signed a decarbonisation declaration that obliges them to achieve climate neutrality by 2030. This goal is implemented through the Wałbrzych Region Decarbonization Program financed by the Just Transition mechanism. It includes, among others:

- Comprehensive modernisation of buildings by replacing heat sources;
- Comprehensive modernisation of municipal heating plants and transition to renewable energies;
- Developing local partnership for the development of renewable energy sources, energy storage, building local energy independence;
- Introducing the use of geothermal energy;
- Adopting the use of hydrogen, mainly in transport.

The city also implements measures aimed at preventing suburbanisation and improving the energy efficiency of public and residential buildings.

Wałbrzych has received support for these activities from the EU, but also from the National Economic Bank, and, finally, the European Investment Bank under the “Juncker Plan” – the investment plan covers the environmental sector (air quality), energy (a comprehensive project to improve the energy efficiency of residential buildings), social assistance and revalorisation of urban spaces. Almost all municipal buildings have already undergone thermal modernisation and their coal-fired heat sources have been replaced with gas heat.



GOAL 8 DECENT WORK AND ECONOMIC GROWTH

City activities in terms of economic growth and decent work are linked to the labour market. The form and the scope of support are determined by the specificity of the functioning of this market and the competency possibilities of cities in this respect. The condition of the labour market is a product of the strength of market factors (demand, supply), which, in turn, discounts other economic conditions (availability of human resources, labour taxation, social security rules, requirements of the labour code) and the economic situation in terms of space and industry.

The labour market is very non-homogeneous, therefore, proposed projects must be dedicated to its certain segments. The first step is to consider introducing a dedicated supply-side approach while recognising the character of the demand side of this market. The supply side is represented by city residents (households). This is a group of people who usually offer their services in the form of contract work. It is differentiated in terms of sex, age and education and competences, health, level of activity in the labour market (working, unemployed, inactive), salary expectations or the level of mobility. Each indicated feature may be a barrier to activity on the labour market, and thus may become a premise for intervention and implementation of projects to remove or lower these barriers.

The demand side of the labour market consists of entrepreneurs who create jobs. This segment is also highly heterogeneous. Differentiating factors exist in the size of the enterprise (micro, small, medium and large enterprises) and the usually associated organisational and legal form, the industry in which the enterprise operates, and from the city's point of view, also its spatial location. The demand for work and its specialisation are also important, which answers the question to what extent the functioning of a given enterprise affects the local labour market. The development of entrepreneurship also has another important dimension for the city, such as the demand for land, infrastructure needs, environmental impact, the risk of spatial conflicts or the impact on the city's image.

The aim of the city's activities, seen through the prism of the employee side, is the possibility of ensuring a decent income for residents - which has the greatest impact on their standard of living. Higher incomes of residents

mean adequately increased revenues from participation in personal income tax, but also reduction of unfavourable phenomena such as poverty or social exclusion, and, consequently, smaller transfers of related funds. A properly diversified economic base is also a guarantee of an appropriate market offer of services that residents need as consumers. Moreover, this element affects the assessment of living conditions in the city.

The city's aim in relation to entrepreneurs is to create a diversified job offer, as well as building a positive economic image. The obvious, but important reasons for the interest in the enterprise sector include the city's income issues (revenues from participation in CIT, real estate tax, tax on means of transport, etc.). Economic entities require a different type of infrastructure from the city, as well as well-thought-out spatial planning that will protect various users of the urban space. The classic factor is the development of the infrastructure necessary for the economic exploration of the city.

Taking into account the above objectives and characteristics, the natural role of the local government as the owner of the area is to care for the welfare of residents and local companies, as well as to create a platform for the exchange of information, on the one hand, about resources, and, on the other hand, about the offers of the local labour market. This knowledge should also be used by future entrepreneurs (investors) that intend to engage local resources.

The component directly influenced by the local government is shaping the educational offer. Schools under the responsibility of local government are places enabling a set of wide-ranging activities adequate from the point of view of the needs of the labour market. The education system can also create new competences and specialties by anticipating and generating changes on the local labour market.

The process of building the city's economic brand may have positive effects for the local labour market. It consists of all the above-mentioned activities and their effects. The idea of creating a brand is to generate a clear message about the city as a place friendly to various economic activities, and is addressed mainly to external stakeholders. Thanks to it, the city improves its competitiveness and it becomes more attractive to investors.

Thus, action designs should include and address:

- supporting residents in taking an active attitude on the labour market by raising competences and creating entrepreneurial attitudes,
- supporting companies at various stages of their operation, maintaining constant contact with business entities in order to learn about their needs,
- shaping an adequate educational offer that is tailored to the needs of local businesses and cooperates with them,

- creating a platform of knowledge about the local labour market, along with its monitoring, taking into account the differences within the city,
- undertaking general development activities, important from the point of view of the possibility of running a business,
- building the economic brand of the city.

DEVELOPMENT DIRECTIONS

- **Striving for stable, sustainable and inclusive economic growth**, as well as full employment and decent work for all residents;
- **Encouraging professional activation aimed at increasing the level of participation in the labour market**, especially among the elderly and young people, women, the long-term unemployed and the disabled;
- **Increasing the level of inclusion of disabled people in social and professional life**;
- **Significantly reducing the proportion of unemployed young people** not participating in education and training;
- **Building the potential of knowledge based on high-quality education**, which serves to raise the qualifications of employees and their attractiveness to industry;
- **Promoting education, knowledge and learning sharing and conducting research for sustainable business practices**;
- **Strengthening the enforcement of labour law provisions**, ensuring more balanced employee protection in different types of contracts;
- **Enhancing the protection of workers' rights**, especially of women, people with disabilities, people at high risk of social exclusion, migrants, refugees, LGTB and people in poverty;
- **Searching for new competitive advantages** based on technological advancement, quality and innovation of the offered products;
- **Promoting the circular economy** in urban development policies;
- **Strengthening the development of industries based on environmental resources**, e.g. using bio-waste in the economy, catering services;
- **Developing entrepreneurship**, in particular, ensuring facilitations in running a business and access to financing instruments;

- **Improving access to public and commercial services**, including banking and finance and insurance;
- **Encouraging small and medium-sized enterprises to create fair jobs** and to actively support social activities;
- **Promoting and disseminating OECD standards for responsible business**;
- **Reducing the unemployment rate** by creating conditions for the development of entrepreneurship and strengthening active attitudes in the labour market;
- **Improving work conditions and promoting safe working environments**;
- **Enhancing the role of cities as platforms for the exchange of experience and knowledge for new experiments related to the development of the economy** (e.g. low-emission and circular);
- **Building business contacts between local entrepreneurs and city structures** serving the purpose of establishing relations with numerous industries and professional groups;
- **Developing cooperation between entrepreneurs operating in the city** through and thanks to the city's active participation in the economic field;
- **Supporting the formation of coordinators and business consultants** supporting the sustainable development of municipal companies;
- **Increasing the scope of activities of municipal units and comprehensive business consulting services**;
- **Achieving higher levels of productivity and efficiency in production** through diversification, technological modernisation and innovation, focusing on labour-intensive sectors and with high added value;
- **Undertaking actions to improve the efficiency of the urban economy** and sustainable production and consumption;
- **Creating conditions that stimulate sustainable business development and job creation**, while protecting the environment;
- **Attracting companies and employees to the city** through a transparent and responsible economic environment and managing the commune's budget;
- **Creating an efficient transport network** that facilitates the freedom of movement;

- Encouraging residents to be active in their place of residence, **attracting and retaining families in the city;**
- **Developing documents, strategies and city policies** that support the development of productive activities, job creation and fair pay, and promote entrepreneurship, creativity and innovation;
- **Promoting the brand and good image of the city.**

PRIORITY TARGET GROUPS

- Inactive inhabitants
- Professionally active inhabitants
- Local entrepreneurs
- People of liberal professions
- Investors. Potential entrepreneurs
- Self-help groups and their relationships
- Non-governmental organisations
- Schools, colleges
- local government
- Social workers
- Professional advisers
- Government administration

MAIN AREAS OF ACTIVITY

- ACTIVATING THE LABOUR MARKET
- DEVELOPING ENTREPRENEURSHIP IN THE CITY
- ENHANCING EDUCATIONAL OPPORTUNITIES
- ELEVATING THE ROLE OF CITIES AS PLATFORMS FOR EXCHANGING EXPERIENCE AND KNOWLEDGE
- UNDERTAKING PRO- DEVELOPMENT ACTIVITIES TO IMPROVE THE FUNCTIONING OF THE LOCAL ECONOMY
- PROMOTING THE CITY BRAND

Main areas of activity	Actions
<p>ACTIVATING THE LABOUR MARKET</p>	<ul style="list-style-type: none"> • Improving the employment of people with various degrees of disability, e.g. through programs integrating these people into the labour market or supporting them in starting a business; • Enacting local skills development programs that enhance employment opportunities; • Providing services such as career counselling (consultations, predisposition tests, psychological tests, supporting people interested in starting a business); • Enacting actions to intensify training and increase placement places dedicated to young residents; • Offering entrepreneurship training for residents; • Creating jobs through convergence, on-going programs and sponsorship; • Developing social economy entities.
<p>DEVELOPING ENTREPRENEURSHIP IN THE CITY</p>	<ul style="list-style-type: none"> • Offering programs dedicated to start-ups, supporting young, innovative companies locating their business in the city at the initial stage of development; • Providing a grant system for new entrepreneurs, including graduates of local schools; • Participating in projects and undertaking activities consisting in the implementing innovative solutions that may become an inspiration for starting a business (e.g. related to clean energy, air quality measurement, circular economy, intelligent mobility, or health and well-being); • Providing assistance (including financial assistance) for starting a business in downtown areas; • Offering premises for business activity; • Respecting the facilitation for entrepreneurs in the financial, accounting and administrative areas, incl. the use of “silent settlement”; • Increasing the competences and knowledge of local entrepreneurs and people starting their own businesses, incl. through information, training and advisory activities, including those financed from EU funds; • Providing advisory support in obtaining additional funds from financial markets, both domestic and foreign;

	<ul style="list-style-type: none"> • Establishing non-commercial business development centres offering, for example: individual mentoring and expert advice, workshops, business events, as well as support in setting up a business; • Supporting the creation of urban research and education centres; • Creating new ventures, platforms and spaces to generate an attractive investment environment; • Developing services dedicated to enterprises focused on better adaptation of employees and entrepreneurs and enterprises to changes in the market;
<p>ENHANCING EDUCATIONAL OPPORTUNITIES</p>	<ul style="list-style-type: none"> • Directing educational programs and offers to work in the city to the needs of business enterprises (providing educational programs and specialties tailored to the needs of the local labour market); • Enhancing agreements with local enterprises, establishing a system of apprenticeships and training in practical competences; • Involving universities in activities promoting entrepreneurship;
<p>ELEVATING THE ROLE OF CITIES AS PLATFORMS FOR EXCHANGING EXPERIENCE AND KNOWLEDGE</p>	<ul style="list-style-type: none"> • Creating municipal economic development agencies connecting the research and business communities and providing students and school graduates information on job opportunities, training, internships and apprenticeships; • Enhancing the activities of business coordinators focusing on contact with companies of various sizes and researching their needs and staff shortages. Coordinators can help companies in finding competent employees who will support the sustainable development of companies and help solve the demand problem and work mismatch. In addition, coordinators promote the benefits of locating investments in the city and educate entrepreneurs on the possibility of using various forms of financial support and work towards the implementation of corporate social responsibility by offering job opportunities for people who are in a difficult situation on the labour market (e.g. young people, long-term unemployed, people with disabilities); • Organising municipal job placement points; • Organising exhibitions, conferences, seminars, publications on professional development and the urban labour market;

	<ul style="list-style-type: none"> • Facilitating meetings and develop effective links between employees and jobseekers; • Organising a variety of related events with job search and thematic information and advisory events; • Organising job fairs, including virtual job fairs;
UNDERTAKING PRO-DEVELOPMENT ACTIVITIES TO IMPROVE THE FUNCTIONING OF THE LOCAL ECONOMY	<ul style="list-style-type: none"> • Conducting a spatial policy that takes into account economic needs and, at the same time, protects against spatial conflicts; • Conducting research on the possibilities, direction, location and development potential of urban entrepreneurship; • Implementing infrastructure investments making individual areas of the city easier for business activity; • Supporting pro-investment activity with the mechanisms of local fiscal policy;
PROMOTING THE CITY BRAND	<ul style="list-style-type: none"> • Strengthening the city's image as a good place to run your own business; • Creating a city brand related to a given industry.

Examples of city-driven initiatives

Italy, Lombardy

The Dote Unica Lavoro project, which was carried out in Lombardy in 2013, is a new policy model to promote access to employment for local jobseekers. It consists in providing direct support that is adjusted to the recipients of aid, which enables access to new areas of employment and improvement of employees' chances on the labour market. It has based its actions on the specific needs and characteristics of each job applicant, matching each job seeker with the most suitable accredited employment agency available and the most appropriate level of support. This was complemented by constant feedback from all actors throughout the process, including active employers and social partners.

The needs of each jobseeker were measured on the basis of their specific personal situation, including indicators such as employment status, educational level, gender, age and distance from the labour market. However, after matching them with the appropriate agency, the latter had the flexibility and freedom to operate within the set budget threshold. This threshold was regularly reassessed in line with the agency's performance in terms of performance and the effectiveness of their practices. Good performance resulted in an increased budget.

The costs of job placement services were only reimbursed after the jobseeker was successfully posted. Consequently, the payment of training services was partially conditional on the achievement of employment performance.

A competitive system of cooperation between public and private employment agencies has proved effective in meeting the region's employment needs and has involved a wide audience and protecting those most affected by the crisis. Thanks to the initiative of 70 607 people in Lombardy, they had access to training, assistance, support and counseling in entering the labour market, of which 57 275 have started work experience (75%).

Source: https://ec.europa.eu/regional_policy/en/projects/italy/a-new-policy-model-is-just-the-job

Spain, Palencia

The EFIDES project is an example of implementing social innovation at the local level through public-private partnerships to improve employment, training, integration, environmental protection and business promotion.

The Centre organises numerous training programs, especially for people at risk of social exclusion, provides counselling and space for new start-ups, and disseminates information on environmental sustainability and energy saving.

The project also promotes urban regeneration by locating the EFIDES centre in the districts of El Cristo and Ave Maria, which are home to high rates of poverty and social exclusion. The centre is therefore crucial to achieving social development and integration, both for these two marginalized districts, and for the entire city.

The main goal was economic, social, environmental and urban revitalisation in both districts. This project contributes to the integration of people at risk of social exclusion (young people, women and the long-term unemployed), both from these districts and the rest of the city, through activities for training, job placement and self-employment, promotion of entrepreneurship and economic activity, in particular, SMEs, micro-enterprises and cooperatives. Its effect is to achieve urban balance and cohesion.

Source: https://ec.europa.eu/regional_policy/en/projects/Europe/the-efides-local-inclusion-project-creating-new-opportunities-for-locals

Belgium, Brussels

The TRIAXES-MAD project is an innovative method of supporting entrepreneurs, which consisted in providing support from three recognised experts. TRIAXES is designed to enable the serial development of an industrial product or the continuation of the development of collections or accessories in the fashion industry. The project was developed by MAD Brussels, Brussels' expert platform in the fashion and design sectors. The TRIAXES project is an

accelerator for the analysis of the product development ecosystem, which is a kind of launch pad. The program provides entrepreneurs with a trio of pre-selected and accredited experts selected from three different disciplines. All such experts have received training to learn about the work of other experts in the trio, all of which was done before working together on the project.

This tripartite work methodology ensures fast and precise project development for specific markets. The methodology was tested in a three-year pilot project as part of company monitoring in Brussels, as well as part of university education. After the support of three experts, which lasts six months, the entrepreneur continues the further development of his/her project. This working methodology has been developed and adapted to the industrial product development, fashion and education sectors, but can also be used to support cross-sectoral areas such as digitisation, graphics and prototyping.

So far, 25 tasks have been completed, 50% of which have been successful. Support for an entrepreneur provided by three experts prior to the project development phase is a service that few companies can afford, especially in the R&D phase. For each project, the work done by experts with the entrepreneur consisted of an analysis of the product ecosystem, the usage scenarios of the actors involved, the concept and development of preliminary prototypes. All this work remains in the research and development phase. TRIAXES 'working methodology has proven its effectiveness in supporting the development of mass-produced products, such as in the fashion sector. It can be implemented for the self-employed, SMEs, start-ups and spin-offs.

Source:

<https://mad.brussels/en/projects/triaxes>

https://ec.europa.eu/regional_policy/pl/projects

Finland, Oulu

The Nivaska project aims to create new employment opportunities by supporting the growth of micro-enterprises through providing tailored support.

The Nivaska steering committee and local entrepreneurs have developed a new way to combine the interests of the private and public sectors in the area. The aim is to use an 'impulse strategy', i.e. to strengthen the positive circle for the development of small and micro enterprises by channelling small amounts of financial support to certain key areas. Project activities are therefore tailored to the specific needs of individual companies. For example, a manufacturing micro-company receives support to create a trademark and catalogue of pro-

ducts, which is not a large expense and plays a key role in the marketing of the company's products in the country and abroad. Support includes consultancy, networking and subcontracting assistance, marketing and export support, and funding for equipment and facilities necessary for sustainable development. Support for each company lasts from 1 to 3 years, depending on the company's needs. The Nivaska project model is easily disseminated.

Source: https://ec.europa.eu/regional_policy/en/projects/Finland/harvesting-the-fruits-of-entrepreneurship

Croatia – Serbia

The XBIT project focused on creating an environment conducive to innovation, IT, entrepreneurship, job creation, talent retention and increasing the number of qualified young professionals in the Croatian-Serbian cross-border area. The most important results were the creation of a cross-border ICT stakeholder network, the design and implementation of educational, incentive and networking programs, and the creation of Fab Labs and Mobile Labs.

The XBIT project included cooperation between the public sector, academia, research and development institutions, corporations, entrepreneurs and business environment organisations. The focus was on education, networking and knowledge sharing. The result is a significant increase in IT-related entrepreneurship on both sides of the border.

The project played a significant role in attracting IT companies and creating new employment opportunities. One of the main results was the creation of three innovation centres, the so-called 'Fab Labs' and one mobile innovation lab equipped with the latest solutions in the field of virtual reality, Internet of Things (IoT), 3D printing and drone technology. These laboratories regularly hold meetings, workshops and a number of courses. The project contributed to the launch of several new start-ups, including one that is developing 3D moulds for the production of fishing lures and archery arrows. Another start-up developed an innovative concept for using IoT-based solutions to track cattle on farms. An additional effect was the development of a curriculum designed to educate traditional companies in the use of new technologies to improve operations. Another product of the project is the created Crossbit network. This is a complex legal entity from stakeholders whose goal is the long-term development of innovation and competitiveness and entrepreneurship.

Source: <https://www.interreg-croatia-serbia2014-2020.eu/project/xbit/>

Good practices from Polish cities participating in the “Action Plan for Cities”

Zduńska Wola

Zduńska Wola, a city that was home to Poland’s textile industry, began to lose industry after the economic transformation in 1989 due to the influx of cheap clothing from Asia into Europe. As a result, with time, the city experienced a strong degradation of its urban functions. In 2019, the city authorities decided to urgently intervene. “Live locally, work globally” – this was how the vision of the city’s development was defined before the outbreak of the coronavirus pandemic. The analysis of trends in the global labour market shows that since the effects of an employee’s work are digitisable, the employer requires less and less physical presence in the company. Thus, the city drive to advertise the brand of the city has enables perspective stakeholders to abandon the idea that the inhabitants of Zduńska Wola are inevitably attached solely to the local labour market.

The action taken towards the implementation of the above assumptions was the creation of a special strategic team in the organisational structure of the Zduńska Wola City Hall, working with the design thinking method. This team looks at the city from a cross-sectional and interdisciplinary basis, and builds flexible task teams for the projects it creates. The basic value it provides to the city is networking. Thanks to the application of a creative approach, projects have been undertaken that combine internal resources with external ones, wherein cooperation with outside stakeholders is practised. The team is currently implementing several projects with different levels of maturity: from the concept, through prototyping, to completed implementation.

The Virtual Hub of Mikrofirm is in the incubation phase. The concept of its construction won in the competition of the Academy of the Cities of the Future of the Polish Development Fund for an innovative development impulse for the Polish local government. The project aims to create an environment for companies digitising their business processes within Zduńska Wola. It is designed both to attract new entities to the city, especially in the field of creative industries and ICT, and to increase the innovativeness of local enterprises. In this way, the local government wants to build a local labour market for specialists. The project is innovative enough that the operator of the National Cloud is interested in its implementation in cooperation with global IT corporations. The aim was to attract modern companies to Zduńska Wola so as to create a job

market for specialists, which would enable people after graduation to return to their home city. Officials decided to use the power of cloud computing, i.e. servers available via the Internet, and create a centre of companies in the city that operate exclusively in the virtual world. This idea has never been implemented in such a formula before, neither in Poland nor abroad. The office is now working with commercial partners on the project of building the Virtual Hub of Mikrofirm.

The team is currently developing further projects that can be classified as good urban practice. One is the concept of training students on climate neutrality, another is the concept of universal digital skills education for all residents.



GOAL 9 INDUSTRY, INNOVATION, INFRASTRUCTURE

DEVELOPMENT DIRECTIONS

- **Building an environmentally friendly, good-quality and useful technical infrastructure** serving the city, that is accessible to all residents, and in which its efficient functioning is assured;
- Using investments in the development and modernisation of municipal infrastructure devices for the development of **green and blue infrastructure**;
- **Moving towards a circular economy** (circular economy) in all spheres of functioning of the municipal sector, business entities and households in the city;
- **Overseeing the smooth operation of complex, interconnected city service systems** and efficient flows associated with production and local consumption, including waste management, plumbing, energy supply, and transport;
- **Applying the latest achievements** in the field of automation, artificial intelligence, ICT technologies and communication **for the efficient management of infrastructure systems and public services**;
- **Increasing the durability of infrastructure, buildings and structures** by planning the full life cycle of a building / product / service;
- **Promoting and developing zero-emission transport for the inhabitants of the city and its vicinity**;
- **Promoting and developing zero-emission transport for tourists**;
- **Providing all residents with access to broadband infrastructure**, enabling access to high-speed Internet and influencing the development of the digital society, modern education, research and innovation, as well as creating a digital single market, providing safe and quick access to electronic public services and efficient communication between public institutions, residents and business;
- **Developing digital public services friendly to residents and available to everyone**, regardless of age and education;
- **Reducing digital exclusion among residents** through training activities and infrastructural;

- **Fostering the integration of immigrants**, inter alia, by facilitating access to public services;
- **Promoting the availability of data and their use by local government authorities** in order to increase citizen involvement, improve the coverage and quality of service, and provide better market opportunities;
- **Developing a compact city with the use of post-industrial and post-rail areas and post-military**, limiting the need for the development of green areas, expansion of infrastructure accompanying housing development, reducing energy consumption and the need for distant relocation of residents;
- **Increasing the city's resilience to climate change**;
- **Planning and implementing local security policies** for risk reduction and preparation for extreme events as well as natural and infrastructure disasters;
- **Creating and developing public-public and public-private partnerships** to promote pro-environmental solutions, exchange of experiences and identification of barriers;
- **Supporting sustainable industrialisation** with a closed product life cycle and environmentally friendly technologies;
- **Development of green technologies for industry**;
- **Modernising technological and transport solutions** used in industry to reduce the negative impact on the natural environment and reduce the carbon footprint;
- Promoting and supporting the **transition of industrial enterprises to green energy**;
- **Supporting enterprises in promoting environment-friendly solutions**;
- **Decreasing emissions and modernising energy-intensive industries**;
- **Limiting and reusing materials and products, especially in resource-intensive industries**;
- **Departing from the manufacture and use of single or limited use products**;
- **Attracting external investors offering products and developing environmentally friendly technologies**;
- **Supporting local entrepreneurship**, in particular, for companies offering products and using technologies that are neutral for the natural environment;
- **Enhancing the cooperation of large industrial enterprises with small and medium-sized local companies**;
- **Supporting the retraining of employees of industrial enterprises carrying out energy or technological transformation**;

- **Developing business environment services** by creating an ecosystem conducive to local entrepreneurship and attracting external investors;
- **Strengthening enterprises producing products or providing services with high added value and advanced technologies;**
- **Developing green industries and knowledge-intensive services;**
- **Increasing investment in research and development** of product and process innovations as a way to increase the competitiveness of local industry and services on a national scale and international;
- **Increasing the use of industry 4.0 solutions in enterprises;**
- **Enhancing the use of digital technologies in small and medium-sized local companies;**
- **Developing co-working spaces;**
- Introducing a wider use of **innovative digital solutions in the promotion and service of tourist traffic;**
- **Building and strengthening cooperation networks for the transfer of knowledge between enterprises, research institutions and universities;**
- **Improving the legal and institutional environment stimulating the undertaking of innovative activities;**
- **Promoting new business models** based on sharing, borrowing, exchanging and renting products and services;
- **Improving the awareness of entrepreneurs and employees of sustainable production process;**
- **Creating comprehensive databases** on business entities operating in the city;
- **Promoting education and knowledge sharing;**
- **Raising the qualifications of the staff (quality of human capital);**
- **Increasing the residential and cultural attractiveness of the city for highly qualified employees** and the creative class;

PRIORITY TARGET GROUPS

- Leading local businesses
- Small and medium-sized local enterprises
- Large enterprises based in other cities
- Economic organisations, industry associations and other business environment institutions
- Communal companies
- local government
- Industrial research and development centres

- Research institutes
- Universities
- Educational and training institutions
- NGOs and citizen groups
- Trade union organisations of local employers
- Local specialists

Other relevant actors

- Cultural institutions
- Provincial self-government
- PARP and other government agencies
- Banks and other financial institutions

MAIN AREAS OF ACTIVITY

- APPLYING INNOVATIVE INFRASTRUCTURE AND TRANSPORT SOLUTIONS
- ENCOURAGING SUSTAINABLE INDUSTRY
- ESTABLISHING AN INNOVATIVE CITY ECONOMY

Main areas of activity	Actions
<p>APPLYING INNOVATIVE INFRASTRUCTURE AND TRANSPORT SOLUTIONS</p>	<ul style="list-style-type: none"> • Introducing solutions in the field of circular economy (circular economy) in various spheres of the municipal sector operation in order to reduce the consumption of raw materials and energy and the amount of generated waste; • Promoting and supporting households and business entities in the development of a circular economy in the city, including the multiple use of materials and products and the limitation of the use of single-use products; • Encouraging the use of intelligent digital solutions for sustainable and effective waste management; • Planning of the full life cycle of a building / product / service to increase the durability of infrastructure, buildings and structures;

- **Expanding green and blue infrastructure** for investments in the development and modernisation of municipal infrastructure facilities, including collection and use of rainwater;
- **Introducing intelligent digital solutions for the efficient management of infrastructure systems**, including monitoring of transmission networks in order to quickly locate faults and interruptions in transmission;
- **Expanding the broadband infrastructure** – hence, enabling universal access to high-speed Internet;
- **Applying intelligent digital solutions for the efficient management of public services**;
- **Developing citizen-friendly digital public services accessible to all**, regardless of age and education;
- **Identifying groups of inhabitants** who are subject to digital exclusion and undertaking training activities and infrastructure to limit their exclusion;
- **Developing a system of support for immigrants** in accessing public services;
- **Promoting sustainable transport**, in particular pedestrian, bicycle and public transport;
- **Constructing systems of multimodal solutions** with interchanges, including the P&R system (park and ride) and the B&R system (Bike & Ride);
- **Using intelligent traffic control systems**, incl. giving priority to public transport vehicles;
- **Providing interactive accessibility maps for public transport in the city**;
- **Introducing telematics**, i.e. current information on light boards about upcoming connections, delays, alternative communication, detour routes, etc.;
- **Enhancing investment activities improving the standard of city roads**, e.g. reconstruction of intersections (including roundabouts), installation of lighting and traffic lights, construction of sidewalks, bicycle paths and pedestrian and bicycle paths;
- **Reducing the pressure of roads on the environment**, e.g. through the use of noise protection, modernisation of drainage systems, etc;
- **Supporting the development of shared travel systems** (vanpooling and carpooling);
- **Supporting the development of car sharing systems** (Carsharing);

	<ul style="list-style-type: none"> • Developing a system informing about free parking spaces based on sensors or intelligent video analytics (Smartparking); • Developing the electric vehicle charging infrastucture; • Promoting and developing zero-emission transport for tourists in the form of buses, cars and electric bikes with the P&R parking system; • Improving traffic conditions and safety through the use of dedicated ICT solutions; • Encouraging the use of green municipal bonds to finance pro-environmental investments in the city; • Applying planning tools and undertaking investments aimed at the development of post-industrial, post-railway and post-military areas; • Collaborating with local entrepreneurs, non-governmental organisations and civic groups for sustainable development;
<p>ENCOURAGING SUSTAINABLE INDUSTRY</p>	<ul style="list-style-type: none"> • Supporting the development of enterprises offering products and developing circular technologies that are neutral for the natural environment, incl. by offering property tax relief as an instrument to attract investors of this production; • Promoting and supporting industrial enterprises transforming towards green energy, energy-saving technologies, more efficient use of energy and lowering the carbon footprint; • Promoting and supporting industrial enterprises that use technologically advanced systems for collecting and storing heat and cooling systems; • Supporting employees who require retraining in connection with the energy or technological transformation of industrial enterprises, in cooperation with labour offices; • Providing support in the creation and development of industrial clusters specialised in products and technologies friendly to the natural environment; • Promoting and supporting industrial investments contributing to the diversification of the city's economy, in particular, in monofabric or single-branch centres; • Developing and supporting business incubators; • Promoting and supporting the development of small and medium-sized local enterprises offering products and using technologies neutral for the natural environment;

	<ul style="list-style-type: none"> • Developing and improving the quality of infrastructure for the location and development of industrial plants; • Establishing institutions that provide professional service to external investors, both new and existing; • Creating institutions supporting local entrepreneurs, incl. in the field of information and legal assistance; • Creating favourable conditions for the development of business environment services; • Supporting localised industrial investments in post-industrial, post-rail and post-military areas; • Promoting and supporting cooperation of large industrial enterprises with small and medium-sized local companies in the production and service sector; • Organising cyclical meetings of entrepreneurs, local authorities and managers of infrastructure companies as a forum for the exchange of views in order to identify development barriers and look for ways to overcome them;
<p>ESTABLISHING AN INNOVATIVE CITY ECONOMY</p>	<ul style="list-style-type: none"> • Supporting new solutions in the field of products and services, production technologies, markets and forms of organisation of companies; • Creating science and technology parks, technology incubators and innovation ecosystems (innovation districts); • Developing the living lab idea; • Increasing research and development spending; • Promoting the use of industry 4.0 solutions in enterprises; • Promoting and supporting the use of digital technologies in small and medium-sized business entities, incl. through virtual hubs of micro-companies; • Promoting the use and development of innovative digital solutions in the promotion and service of tourist traffic; • Promoting and implementing eco-innovation; • Creating favourable conditions for the development of co-working spaces; • Improving the level of education to increase skills in the field of life sciences, engineering and technical problem solving; • Enhancing educational activities to encourage life-long learning;

	<ul style="list-style-type: none">• Providing general education in the field of digital competences through on-line and stationary trainings and workshops;• Implementing training and consulting programs aimed at the acquisition by companies and their employees of the competences necessary for innovation management in the enterprise;• Creating innovation centres aimed at developing good practices and standardising the services they provide and supporting entrepreneurs in using the most modern innovative solutions;• Organising fairs, exhibitions, conferences and training and economic undertakings that will contribute to building a platform for the exchange of knowledge and experience and building business relationships;• Co-organising start-ups that will introduce entrepreneurs to the innovation zone, creating support programs for high-tech start-ups;• Initiating the creation of an urban innovation laboratory;• Increasing the residential attractiveness of the city for highly qualified and creative staff by providing high-quality services and public spaces, as well as a good condition of natural environment, including air quality;• Creating and updating strategies and plans to support innovation.
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Examples of initiatives undertaken by city authorities

Gdynia can be an example of introducing various innovative solutions in the economy and management of the city. It became the first city in Poland where the 5G network was launched on a large scale by the telecommunications operator 'Play'. Thanks to the significantly greater capacity, new opportunities for collecting data on the functioning of the city and improving city management has opened up, through the introduction of innovative smart city tools, including the developing of the Internet of Things. At the same time, it has created a new platform for sharing data about the city with its inhabitants, enterprises and tourists. It has also provided opportunity to attract companies and start-ups that are looking for a testing ground for their solutions, and can be used as a promotional argument in attracting entrepreneurs, residents, students and tourists.

<https://pfrdlamiast.pl/baza-miejskich-innowacji/gdynia-pierwsze-miasto-w-polsce-z-dostepem-do-5g.html>

Gdynia also stands out among the rapidly growing group of Polish cities in implementing new solutions in the field of transport and new forms of urban mobility. As part of the CityChangerCargoBike (CCCB) project, the city makes available to residents and entrepreneurs and non-governmental organisations, free cargo (delivery) bicycles. This solution has so far been used only in a few European cities. It allows the use of special models of bicycles for private logistic trips for shopping or transporting children, as well as for commercial cargo deliveries. It contributes to the reduction of road congestion and the reduction of pollution and noise emissions in the city.

<https://www.mobilnagdynia.pl/m-projekty/city-changer-cargo-bike/510-city-changercargobike-cccb-2>

An interesting activity is the Urban-Lab Municipal Laboratory established in Gdynia in 2019. It is an open formula for identifying urban problems and searching for innovative solutions for the city as a meeting platform for residents, non-governmental organisations, entrepreneurs, universities and scientific institutions, as well as city officials. This has led to civic participation and democratic solutions being applied in city management. It is related to an open, open-source Internet platform, which is the portal <http://otwartedane.gdynia.pl> that provides, inter alia, datasets on climate change, participation possibilities and pandemic restrictions. Experiences of this pilot activity in Polish conditions may be interesting for other cities.

<https://urbanlab.gdynia.pl/>

Good practices from Polish cities participating in the “Action Plan for Cities”

Gliwice

Strategic thinking in the city has been focused on increasing the economic potential, treating it as a foundation for the city’s development. It is the strong position of the Gliwice economy that is the starting point for activities in other areas, providing them with a stable basis and the necessary resources.

The implementation of the objectives of the previous strategy, mainly focusing on the economic development of the city, the growth of investments and the creation of new technology companies, meant that in 2022, Gliwice can be described as a city with a high development position in terms of economy, above-average level of remuneration of residents and income in the



Photo 13. New Gliwice. Źródło: City Hall in Gliwice, Baranowski Marcin (Mosquidron)

local budget. The infrastructure base of the economy is also well developed, including technology companies (investment areas, land reserves in the area of the Gliwice Economic Area, business environment institutions, office space), good conditions have been created for the development of multimodal logistics (road, rail, air and water accessibility), and the low level of unemployment and short periods of recovery of individual people from unemployment testify to a stable labour market. The city actively participates in the cooperation network and is looking for partnerships that support the development and implementation of innovations.

Therefore, the main challenge of the city when formulating the Gliwice 2040 strategy is to maintain a high level of development and quality of life, with dynamically changing external conditions, automation of production processes, progressive digitisation and changes in work models.

The city authorities has consistently implement an entrepreneurship development support program, using the tools and the offers of two companies established for this purpose - Upper Silesian Market Entrepreneurship Accelerator (GAPR) and Science and Technology Park “Technopark Gliwice”.

GAPR, as a thriving business environment institution, is a platform for dialogue and cooperation between Silesian entrepreneurs and state and local government authorities. In its activities, it focuses on high technology services, which, combined with new communication routes, modern facilities and available land for development, makes the company exceptionally attractive. In addition, the company implements a number of innovative projects that enhance the region's competitiveness and significantly support entrepreneurial attitudes, opening the way to creating and implementing innovations. GAPR is the coordinator of the MedSilesia Cluster - Silesian Medical Device Network, which was granted the status of the National Key Cluster by the Ministry of Economy in 2016. Currently, the cluster comprises 110 entities, 85% of which are enterprises operating or offering services in the technology, devices and medical devices sector. The other partners are research and development units and universities from Silesia. Moreover, GAPR is involved with capital in the Silesian Centrum Science and Technology of the Aviation Industry, which is one of the most modern centres for the production of composite structures in autoclave technology in Europe, together with a research laboratory, thus implementing the city's efforts to develop new technologies, strengthen economic specialisations and support the development of new technology companies.



Photo 14. Scientific and Didactic Centre of New Technologies of the Silesian University of Technology. Source: Szymik Jakub

In 2004, the company Technopark Ltd. in which, in addition to the city as the main shareholder, the shareholders are: the Silesian University of Technology and the Katowice Special Economic Zone was established. It is another modern entrepreneurship support centre in Gliwice. Good infrastructure, training and consulting services, as well as the implementation of international, central and regional support programs has created a friendly atmosphere for business. The “Technopark Gliwice” is actively involved in enhancing the reputation of Gliwice as a place to locate businesses.

The development of entrepreneurship in the region and beyond is confirmed by the extensive cooperation with its technological institutions, universities, science parks and foreign organisations, as well as the numerous projects that have been successfully implemented, with particular emphasis on academic entrepreneurship. So far, over 2.5 thousand students of the Silesian University of Technology and other universities have been trained in entrepreneurship, running a business and business models, and over 80% of companies operating in Technopark are companies closely related to the structures of the Silesian University of Technology.

From the very beginning, the company has been supporting the incubation and development of innovative enterprises, for which, in addition to modern rooms (made available in a convenient location), a number of additional amenities have been prepared, including:

- firm incubation,
- workshops,
- individual consulting,
- coworking,
- virtual office,
- competence centre,
- business model development.

“Technopark Gliwice” is also an extensive, expanding network of contacts and connections between companies operating in various areas. Thanks to many years of activity, the Park has a huge technological and expert base and has had success in developing numerous business initiatives, among others:

- 3D Printing Laboratory, including consulting, audits, testing digital readiness of enterprises and training,
- Technology Accelerator - conducting activities in the field of co-financing R&D projects in the proof-of-principle (PoP) and proof-of-concept (PoC) phases, in order to increase their supply and attractiveness for investors in subsequent financing rounds,
- ICT Observatory - activities including analyses and reports,

- Specialists in the area of Information and Telecommunications Technologies, support for ICT companies in the voivodeship, monitoring of the Voivodeship's Intelligent specialisation - ICT.

A good practice that the City of Gliwice can present is its approach to managing the economic development of the city that is based on a consistently implemented development strategy. The existing strategy (Strategy for the Integrated and Sustainable Development of the City of Gliwice (until 2022) allowed for the development of a well-functioning system for setting development goals, their implementation and monitoring of indicators.

The current development strategy implementation monitoring system is based on the Gliwice Strategy Implementation Program (GSIP). The strategic and operational goals set out in the strategy are enacted through projects and undertakings included in the GSIP, which in turn have their guardians, i.e. strategic project coordinators. Project coordinators are both experts from the Office and those operating in independent entities and organisations, defined for the purposes of the Strategy as the so-called 'external coordinators'.

In annual cycles, a standardised procedure is carried out to verify the indicators assigned to each operational goal, on this basis, the Strategy implementation monitoring report is prepared, which, in accordance with Art. 28aa of the Act on Commune Self-Government, is an element of the Report on the State of the City. The report is published on the office's website in BIP. At the same time, the implementation of strategic projects and undertakings is also periodically analysed, along with an assessment of the risk of their implementation. In addition, during the year, working workshops with coordinators are organised, during which the determinants of the Strategy execution are jointly discussed and methods are developed that favours better project success.

The "Strategy 2022" program is available from the web browser, which makes it easier for all participants of the Strategy implementation process. Depending on the scope of tasks related to the fulfilment of the Strategy, users have different rights: coordinators enter data and modify information about their projects, while the City Development Office has the ability to easily control the timeliness of data entry, generate reports and monitor the level of measures. The program enables continuous expansion and improvement of functions. The creation and implementation of the "Strategy 2022" Program streamlined the process of monitoring the strategic document, and made it possible to integrate the Strategy data with other city management instruments, while allowing it to extend the scope of available IT tools, and is a valuable source of information for the management and residents of Gliwice.

For the implementation of the above-mentioned activity, in 2012, the "Strategy 2022" Program was awarded the City of Gliwice with the first prize in

the competition of the Ministry of Regional Development in the competition Best Practices of Strategic Management of the Country's Development.

After several years of experience, the monitoring system has achieved a high degree of stability. The last monitoring report (2021) shows that thanks to the consistency and cooperation of a group of independent entities - actors from the local economic, educational, social and political scene - most of the goals were achieved. Not everything went according to the original plan, as the conditions of certain processes have changed significantly over the years. However, consistent and systematic enactment of the economic goals of the Strategy until 2022 has allowed the cooperation of the activities of the City Hall, municipal units and companies, as well as external partners, so as to enable them to focus on the priority areas of the development of Gliwice.

The system presented here in the next perspective - by 2040 has been improved and extended, both in the process of formulating strategic assumptions and in the thematic area, and external actors were invited to the process of formulating the Gliwice 2040 strategy - in various forms and at various stages (as discussed in the next section). The challenges currently facing Gliwice, in addition to the newly defined economic, include spatial, environmental and social challenges, which are reflected in the formulated vision, mission and strategic goals.

Płock

During the People's Republic of Poland, Płock began to develop dynamically thanks to the construction of Mazowieckie Refinery and Petrochemical Works (now PKN ORLEN). It then became an industrial centre, which resulted in changes to its social, demographic and identity structure. The industrialisation of the city was also influenced by the establishment of large plants, such as the Płock River Shipyard (launched in 1945), as well as the Harvesting Machines Factory and Knitting Industry Plants "Cotex". With time, the importance of PKN ORLEN, which performs a leading role in the region for the development of knowledge and science, has gained in importance. In 2004, the first CIFAL Płock centre in Central and Eastern Europe was established in Płock - an affiliated training centre of the UN Institute for Research and Training UNITAR. CIFAL is a centre for building opportunities for development and exchange of knowledge between local governments and central government units, as well as international organisations, the private sector and representatives of civil society.

One of the main assumptions of CIFAL's operation is building an urban agglomeration based on the smart city idea. By providing a wide range of

innovative training and networking opportunities, the CIFAL network contributes to developing the potential of local government representatives and local community leaders. Based on the acquired knowledge, they can plan and build cities in a sustainable way, i.e. one that takes into account the creation of new jobs, while reducing the negative impact of metropolises on the environment.



Graphic 2. Logo CIFAL. Source: City Hall in Płock

Numerous solutions related to the smart city idea have been executed in Płock, which perfectly fit into the implementation of the Sustainable Development goals, including SDG 9:

1. Effective energy management in municipal buildings
2. Intelligent transport systems (i.e. intelligent bus stops)
3. Applications and intelligent communication
4. Ecological transport (city bikes, electric scooters)
5. City card and many other related initiatives.

Both the PPP Commission and CIFAL have the task of educating cities in PPP, spatial planning and sustainable urban development. The consistently commissioned development policy has resulted in a high, third place in the Ranking of the potential of medium-sized cities for the location of investments in the modern business services sector (according to a study commissioned by the Ministry of Investments and Development). At the same time, Płock was recognised as a leader among medium-sized cities in terms of implemented innovative tasks in the broadly understood area of local and regional development. Actions aimed at stimulating entrepreneurship were also appreciated. Among these are:

- the co-working space in Przetwornia Old Town Business Centre as a non-standard infrastructure solution that can help in the development of advanced services processes,
- The Academic Entrepreneurship Incubator at the Paweł Włodkowic, who helps entrepreneurs in the process of opening and running their own businesses,
- coordinating at the regional level, the World Entrepreneurship Week - an international project organised in 170 countries, consisting of free training, workshops and campaigns aimed at promoting the development of own business, brand or start-ups - and building a network of contacts,

- Hackathon City Coders Płock, a programming marathon aimed at promoting programming and IT as an interesting career path, among the young inhabitants of our city.

Attention was also paid to building the city's brand through, among others:

- the global CIFAL UNITAR network - one of the training centres of the United Nations Institute for Research and Training is located in Płock,
- the role of the main local government partner during the European Economic Congress in Katowice,
- implementing and promoting Public-Private Partnership with the title of a national leader, incl. by organising the International PPP Forum.

The flagship project, which has permanently entered the calendar of city events and at the same time perfectly fits in the realisation of SDG 9, is the Płock programming marathon - City Coders Hackathon Płock. The Hackathon is a unique project that, by supporting the entrepreneurial attitudes of young inhabitants of Płock, at the same time, contributes to the improvement of the quality of life of all inhabitants of Płock. This event has been carried out since 2017, and each subsequent edition is becoming more and more popular - among participants, sponsors and partners of the event.



Graphic 3. Hackaton logo . Source: City Hall in Płock

Rzeszów

In recent years, the City of Rzeszów has put in place a pilot Urban Lab project, defined as an instrument (part of the city selected to experiment with selected solutions) of cooperation between municipal authorities and residents, enterprises and scientific entities, aimed at improving the quality of life of residents through applying innovative solutions to identified problems (initiating, prototyping, testing, implementing and evaluating projects) and generating additional value with the use of urban resources.

Urban Lab's mission was to operate based on 4 pillars:

1. Cooperating with partners in order to develop solutions for diagnosed urban problems.
2. Providing city data on the www.otwartedane.ereszow.pl portal, that is appropriate for all groups of city stakeholders, and which can be used to create innovative solutions and projects that can be fulfilled by Urban Lab and its Partners.
3. The activity of the Innovation Incubator being supportive of the process of developing innovative projects submitted by residents.
4. Running the Urban Cafe, which is a space for meetings and debates of the city's residents with city authorities, local governments, scientists and business representatives, where coffee is only a pretext for discussion.

In relation to the SDG 9, the City of Rzeszów has achieved the following distinctions in the area of the executed Urban Lab Rzeszów project:

1. Otrzymanie tytułu Ambasadora Polski Wschodniej 2019 w 7 Edycji Konkursu w kategorii Samorząd: Miasto Rzeszów – Urban Lab Rzeszów.
2. Miasto Rzeszów został finalistą konkursu Innowacyjny Samorząd 2020 Serwisu Samorządowego PAP za realizację projektu Laboratorium Miejskie Urban Lab Rzeszów.
3. Rekomendacje ze strony Pani Minister Jadwigi Emilewicz, po odwiedzinach w Urban Lab Rzeszów 4 września 2020 roku „...najbardziej kreatywne miejsce na mapie Rzeszowa – Urban Lab Rzeszów, gdzie młodzież udowadnia, że można łączyć zabawę z nauką, grać i jednocześnie przenosić swoje miasto w wirtualne przestrzenie najpopularniejszej obecnie gry” Jadwiga Emilewicz, Wiceprezes Rady Ministrów, Minister Rozwoju.
4. Projekt Urban Lab Rzeszów został wyróżniony w konkursie „Innowacje w polityce” w kategorii „Demokracja” i zakwalifikowany do finału konkursu. Do konkursu zostało zgłoszonych 413 projektów z 25 krajów europejskich. Jury The Innovation in Politics Institute, składające się z 1032 osób, wybrało 90 finalistów, pośród których znalazł się rzeszowski projekt.
5. Finalista w kategorii: Gminy Miejskiej, Projekt: Urban Lab Rzeszów w Konkursie Innowacyjny Samorząd Serwisu Samorządowego PAP (26.02.2020)
6. Gmina Miasto Rzeszów aplikowała do prestiżowej światowej sieci „Miast Przyjaznych Starzeniu” Światowej Organizacji Zdrowia (WHO) w oparciu prowadzone działania na rzecz Seniorów w ramach działań zapoczątkowanych w Urban Lab Rzeszów.

As part of the Urban Lab project (2020 - 2021), pilot solutions were created on the basis of cooperation of enterprises with public administration, business environment institutions and scientific and research institutions and residents. Among others, the following projects were enacted:

1. Solar multimedia bench. The idea submitted by the residents concerned the installation of a municipal solar bench that draws energy from the sun, thanks to the built-in solar panels, the demand for energy will be reduced. An additional function is to charge mobile devices via USB or by induction (for specific phone models). The action was accomplished under the project “Adaptation of the concept of Urban Lab in Rzeszów”. The project was co-financed by the European Union from the Cohesion Fund under the Operational Program Technical Assistance 2014 – 2020.

Urban Lab Rzeszów - Laboratorium Innowacji Miejskich



Pomysł zgłoszony przez mieszkańców dotyczył ustawienia miejskiej ławki solarnej, która będzie czerpała energię ze słońca, dzięki wbudowanym panelom słonecznym zmniejszy się zapotrzebowanie na energię. Dodatkowa funkcja to ładowanie urządzeń mobilnych poprzez USB lub metodą indukcyjną (dla określonych modeli telefonów). Pierwsza ławka powstała w Parku Jedności Polonii z Macierzą (ul. Księdza Józefa Jajłowego 9, 35-001 Rzeszów).

4

Ławka solarna –
multimedialna

Graphic 4. Solar multimedia bench. Source: City Hall in Rzeszów

Bumblebee home – enables observation of bumblebees while collecting food and introduces the use of vegetation favourable to pollinating insects. The bumblebee home was built on an area of 100 m². A prism was created in this area, which was made, among others, by from branches, straw, leaves, covered with earth and planted with flowering plants. It is the first social garden of bumblebees in the city space in Poland.

The action was implemented under the project “Adaptation of the concept of Urban Lab in Rzeszów”. The project was co-financed by the European Union from the Cohesion Fund under the Operational Program Technical Assistance 2014 - 2020.

The Urban Lab concept was developed by the team of the Institute for Urban and Regional Development with the direct support of the Ministry of Funds and Regional Policy, which co-financed the Project with funds from the Operational Program Technical Assistance for 2014-2020. As part of the presented concept, the City of Rzeszów has developed a number of solutions that are perceived internationally as good practice (examples of implementations are described in point 3.1 Rzeszów's activities on the way to the implementation of objective 9. Innovation, industry, infrastructure in recent years).

Urban Lab is a space for developing innovative solutions and ideas for the city, the testing and implementation of which will improve the quality of life of Rzeszów residents.

The project was co-financed by the European Union from the Cohesion Fund under the Operational Program Technical Assistance 2014-2020, and currently Urban Lab functions in the structure of the City of Rzeszów (from January 1, 2022) as the Urban Innovation Centre - Urban Lab and combines two social approaches and technological, which are an important reference to the implemented SDG 9. The above examples refer to the cooperation of municipal authorities with residents, enterprises and scientific entities by improving the quality of life of residents through the application of innovative solutions to identified problems (initiating, testing, implementing and evaluating projects) and by generating additional values when using municipal resources.



Graphic 5. Bumblebee home – solar garden. Source: City Hall in Rzeszów



GOAL 10 REDUCED INEQUALITIES

In the report “Unequal road”, presenting the state of social inequalities in Poland, it was stated that the problem of unequal opportunities occurs in all aspects of social life, “from education to political rights and the possibility of influencing the political agenda”. It is true that the scale of income inequality in Poland is not large, and the poverty dynamics is negative, but there are still social groups that are more at risk of marginalisation. This problem is particularly relevant to “large families or single parent families, families of people with a low level of education, disabled people and their families, inhabitants of rural areas or economically degraded areas, as well as people dependent on the state”. Their worse situation manifests itself in limited access to housing, health care, care services, education, good work and meeting higher needs. Additionally, there are quite large differences in the economic situation depending on the place of residence. This situation is not so large in the urban-rural cross-section as in the case of differences between regions. Social programs at the national level flatten these inequalities, but the interregional disparities in the risk of poverty are still observable and result in migration trends, especially in relation to the search for better housing conditions and access to social services (kindergartens, good education, healthcare and care services for people such as the elderly). A significant obstacle in facing the challenges of social inequalities are the disproportions of civic competences, including the readiness to participate in civil society, and in looking for innovative solutions in the realities of the market economy. The necessity to level digital competences and involve young people in urban development as much as possible is also of great importance.

DEVELOPMENT DIRECTIONS

- **Supporting an effective social security system;**
- **Providing Better alignment of policy on urban development and cohesion;**
- **Increasing the income of the poorest inhabitants;**

- **Supporting transparent fiscal**, wage and social protection policies;
- **Providing effective development aid** and ensuring the related smooth flow of financial resources;
- **Eliminating the differences in the socio-economic development of districts**, preventing the creation of new development disproportions;
- **Countering social and economic inclusion of people with disabilities** by increasing the availability of the physical environment, ICT, products and services;
- **Supporting job creation in areas with less favourable development conditions**, e.g. in post-industrial areas;
- **Eliminating social and economic exclusion**;
- **Supporting and conducting revitalisation processes**;
- **Developing innovative activities**;
- **Increasing the accessibility of cities through the development of transport infrastructure**;
- **Providing all residents, especially the elderly, and with disabilities, equal opportunities** in achieving a social position and independent functioning;
- **Building age-friendly cities**;
- **Improving the accessibility of public spaces, basic public services such as education and healthcare**;
- **Improving public awareness and knowledge of human rights and rights and employee duties**;
- **Strengthening and promoting the social, economic and political integration of residents**;
- **Combating discriminatory laws, policies and practices** to ensure a level playing field;
- **Counteracting discrimination and violence against particularly vulnerable groups**, including: women, LGBT and transgender communities, people with disabilities and other minorities;
- **Improving housing conditions**;
- **Investing in improving the accessibility of culture, services and recreation**.

PRIORITY TARGET GROUPS

- Local government officials
- Local authorities
- Social workers
- Self-help groups
- Healthcare workers
- Teachers
- Non-governmental organisations
- Youth clubs
- Volunteers
- Revitalisation specialists
- Unions

MAIN AREAS OF ACTIVITY

- REVITALISATING AND ELIMINATING EXCLUDED AREAS
- ELIMINATING SOCIAL EXCLUSION
- CREATING CITIES FRIENDLY TO AN AGING SOCIETY

PRZYKŁADOWE DZIAŁANIA W ZAKRESIE WDRAŻANIA 10 CELU ZRÓWNOWAŻONEGO ROZWOJU

Main areas of activity	Actions
REVITALISING AND ELIMINATING EXCLUDED AREAS	<ul style="list-style-type: none">• Identifying degraded areas and pressing for needs housing;• Providing advisory and expert support to develop recommendations for revitalisation processes;• Enhancing the availability of affordable housing in the city, social services and public utilities;• Improving the accessibility of health care centres (e.g. free primary care visits and check-ups, free or subsidised dental treatment);

	<ul style="list-style-type: none"> • Providing financial assistance to local entrepreneurs conducting business activity in selected industries (e.g. in the form of loans granted on preferential terms); • Focusing on economic modernisation of weaker neighbourhoods;
<p>ELIMINATING SOCIAL EXCLUSION</p>	<ul style="list-style-type: none"> • Supporting social tourism, including disabled-friendly tourism (e.g. mapping tourist attractions for people with disabilities); • Organising initiatives supporting a fair employment system, enabling people of different social status to work in their structures; • Conducting an open and transparent social dialogue with employees (e.g. support for trade unions and works councils); • Undertaking projects to improve working conditions; • Conducting projects related to the professional activation of people with disabilities; • Conducting educational and popularisation activities on human and employee rights in the field of publications (e.g. reports, leaflets) and the organisation of briefings and information meetings; • Counteracting discrimination and violence against particularly vulnerable groups, including women, LGBT communities, transgender people, people with disabilities and other minorities – by providing educational and popularising activities; • Running city / district and family social welfare centres dedicated to specific groups, e.g. youth; • Implementing and monitoring programs to tackle inequality and discrimination; • Ensuring gender equality at the local government level (e.g. the composition of the City Council and District Councils); • Providing additional maternity and child care benefits; • Integrating training of employees concerning the employment of young mothers; • Involving organisations working on behalf of women in the city development policy;

	<ul style="list-style-type: none"> • Reaching out to residents at risk of exclusion, and from deprived neighbourhoods to ensure universal access to education and training;
<p>CREATING CITIES FRIENDLY TO AN AGING SOCIETY</p>	<ul style="list-style-type: none"> • Conducting campaigns for the active aging of inhabitants; • Providing safe, clean and pleasant public spaces with an adequate number of safe and well-kept seats; • Providing well-maintained and unobstructed sidewalks and footpaths; • Making sidewalks and pedestrian crossings of non-slip materials, of appropriate width, descending to street level; • Marking cities with devices and elements of equipment dedicated to people with disabilities (e.g. sound signals, guiding elements, etc.); • Supporting age-friendly city campaigns / initiatives / ventures; • Improving the housing conditions of the elderly (e.g. equipping residential buildings with elevators); • Running district / city meeting places for seniors; • Offering support in the development of the information society by assisting seniors in the use and operation of digital devices.

Good practices from Polish cities participating in the “Action Plan for Cities”

Elk

Despite the decreasing demand for social assistance in Elk, the number of Elk citizens requiring support is still higher than in cities with a similar function - being the core of the functional areas of sub-regional cities. Poverty is a characteristic of multi-problem environments, where the inhabitants experience unemployment, poor housing conditions and various dysfunctions, including that in care and educational matters. Although the “Family 500 plus” program has contributed to reducing the scale of poverty in families, they still need to be supported in caring and educational competences, in shaping proper patterns and relationships in the family, in the development of children and youth, in social activity and integration and in overcoming life difficulties. Therefore, one of the goals of the Strategy for Solving Social Problems of the Elk City Commune for 2019-2023 (goal no. 3) is “Reducing the scale of the risk of social exclusion of residents related to poverty, professional inactivity

and homelessness”. Complementary with it is goal no. 4 “Creating conditions for the development of an informed and engaged local community”.

The phenomenon of poverty is particularly intense in Elk’s downtown - which is now undergoing revitalisation. The challenge of the social policy of Elk, including the revitalisation process, is the intensification of activities aimed at people / families in the most difficult situation, who are experiencing many problems causing them to be increasingly excluded from social and economic life. People belonging to the groups at risk of marginalisation still require comprehensive support and the creation of the necessary conditions for integration with the society. The implementation of city strategies, programs and activities is to reduce negative social phenomena, accelerate the socio-economic development of the city and improve the quality of life of its inhabitants. It is especially important to support families in order to prevent such phenomena as inheriting poverty, violence, addictions, and caring and educational helplessness.

In this aspect, a special role is assigned to public institutions, primarily the Municipal Social Welfare Centre in Elk (MOPS), which annually supports around 300 families experiencing care and educational difficulties. MOPS in Elk is actively seeking and applying various solutions to support the city’s residents, including through the municipal unit, operating since 2019 - the Elk Centre for Social Revitalisation “Stables”. With the help of the population of the revitalisation area, the municipal government creates new spaces and facilities that will serve social activity in the city centre, in line with the slogan of the model revitalisation of Elk: “People act to create places”.

Elk is a pioneer of street-working, i.e. work with children/youth based on enabling their free time to be spent in an active and developmental way in the place of their daily stay. The need to work with this method resulted from the observed problems in the functioning of families. Large-scale emigration, increasing professional activity, the rush of life and enormous stress resulting from this situation, the deficit of authorities, the development of technology and electronic media have a large impact on the functioning and relations between family members. The intensification of social problems has resulted in an increase in the number of so-called “street children”.

The work of street-workers in Elk was initiated in 2009 as a preventive solution, supplementing the traditional system of helping and supporting families. As part of the Municipal Program for the Prevention and Solving of Alcohol-related Problems, the project “Give me a chance, I can too” was created. At that time, street-work was still an innovative method and the city wanted an action that would contribute to increasing the competences of people

Street children - children under the age of 18 who live in a street environment for a longer or shorter periods of time. They move from place to place and have their peer groups and other contacts. They are registered at the address of their parents or some social institution. Characteristic for them is a weakened contact with the parents, representatives of schools, welfare institutions and social services that should be responsible for them (definition of the Council of Europe).

dealing with street pedagogy in Elk and perhaps extending this form of social work to other cities. This need resulted in the project “Elkie Centre for Social Revitalisation”, consisting in the creation of a school of animation and street-work, which received a distinction in the competition “Poland Becomes More Beautiful - 7 Wonders of EU Funds”. After completing the theoretical classes, a group of 20 trained educators worked with children and young people on the streets as part of their practical classes.

Many years of experience in working with the method of street-work and the implementation of many projects show how important it is to involve young people and the community in which they live in all activities that may change their perception of reality, attitude and, above all, increase their sense of value.

Based on the achievements of street-work in Elk, programs, places and projects have been created that give the local community space for activity and development on many levels. According to the slogan of the Elk revitalisation “People act to create places”, social reintegration takes place by providing residents with space for activity, e.g. a tenement house put into use by non-governmental organisations, the Elk Centre for Social Revitalisation “Stable”, the Senior Club, modernised courtyards and public spaces. Such investments are also accompanied by social projects. In 2022, the renovation of the historic sports hall will be completed, which is to be another place for the commission of the initiatives of the inhabitants of Elk.

From July 1, 2016 to October 31, 2018, the Elk City Commune enacted the project “New Downtown of the City of Elk - a model for revitalisation”. This concept received funding in the “Model city revitalisation” competition. The tasks focused on the Elk Downtown district, its inhabitants and their problems. The idea of the project was to develop a universal and effective model of activities in the field of reviving this part of the city that is based on the experience in the field of street-work and creating social space. The project included, among others:

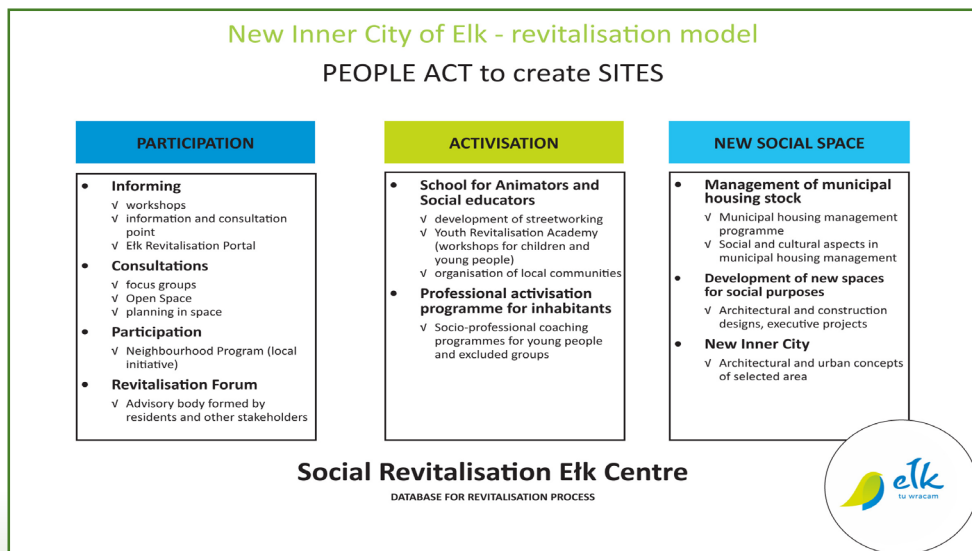
- Model School of Social Animators and Pedagogues, which included:

- Workshops on the competences of a street-worker (street-educator),
- Youth Revitalisation Academy (workshops for children and youth),
- Initiatives under the Neighbourhood Program (preparation and implementation of mini-projects - ideas of residents),
- Public consultations on the update of the Elk Revitalisation Program (supplementing with new projects),
- Functional policy of the Elk Centre for Social Revitalisation,
- Professional activation programs for the residents of Downtown,
- Inventory of real estate in Downtown area,
- Architectural and urban concepts of selected areas downtown,
- Technical documentation for selected projects,
- Educational activities in the field of revitalisation.

The Elk Social Revitalisation Centre “Stable” has been operating since 2019. Its scope includes help and cooperation with various entities, social participation, activation, support for cooperation of social services and the formation of a new social space for the inhabitants of Elk.

The aim of the activity of “Stable” is:

- conducting preventive information and educational activities in the field of solving alcohol-related problems and counteracting drug addiction,
- running the Crisis Intervention Centre in Elk for families affected by domestic violence,



Graphic 6. New Downtown of Elk – Pattern for Revitalisation. Source: <https://www.rewitalizacja.elk.pl/o-projekcie-nowe-srodmiescie-miasta-elk-wzor-na-rewitalizacje/> [accessed: 21.12.2021]

- supporting the activities of institutions, associations and natural persons aimed at solving alcohol-related problems,
- increasing the availability of therapeutic and rehabilitation help for addicts,
- enabling the social and professional reintegration of people and families in crisis and in a situation limiting their participation in professional, social and family life.

Various entities use the provided rooms: Family Clinic, Consultation Point for people experiencing domestic violence, Local Regional Centre for Assistance for Victims of Crime, Youth Social Integration Club, Senior + Club, Crisis Intervention Centre, University of the Third Age in Elk. Regular meetings of the Municipal Commission for Solving Alcohol Problems are also held here. In addition, the rooms are made available to entities and organisations carrying out activities for families from the local environment, primarily in the area of revitalisation.

The rooms of the ECRS “Stable” are available free of charge. The condition for using them is to carry out activities that are part of the Prevention Program.

In the “Stable”, in particular, the following tasks are performed:

- providing round-the-clock support to people / families in crisis at the Crisis Intervention Centre regarding domestic violence, including addictions,
- specialist counselling addressed to people / families in crisis,
- social and professional activation of people and families in crisis,
- organisation of activities for the active integration of people and families in crisis,
- addiction prevention through education and organising alternative forms of spending free time, including: organising free time for children, adolescents, seniors, adults, developing interests, supporting the development of children and adolescents, shaping pro-social attitudes,
- counteracting the isolation and marginalisation of people and families in crisis, including those at risk of social exclusion or being socially excluded, by providing activities intended for improving the quality of life.

The effect of the activities of “Stable” was the creation of such mechanisms to support people, families, children and adolescents, in particular those affected by various problems and crises, that contribute to reducing the scale of these problems. Specialists, animators, social workers, and family assistants who carry out activities in the field of support and assistance to the needy and the local community, play key roles. The “Stable” Centre for Crisis Intervention conducts not only activities supporting people experiencing violence, but also activities contributing to the inclusion of the local community, organisations and institutions, including the media, in activities aimed at counteracting violence.

A comprehensive, multi-faceted approach to helping people in crisis allowed for better coordination of the activities of institutions, services and entities, thanks to which their effectiveness increased and the possibility of mutual learning, sharing knowledge and experience was created. It also allowed for the effective use of resources, instruments, as well as developed and proven cooperation. Herein, funding came from subsidies, incl. national programs and EU funds.

Malbork

The city of Malbork has been executing an integrated revitalisation project “Malbork na +” since 2018. Two of the six objectives of the Revitalisation Program are dedicated to the improvement of social cohesion as well as the integration and activation of the local community. When programming the revitalisation process in 2015-2017, social research was carried out, as well as a series of meetings and workshops on public spaces in the revitalisation area. As a result of the meetings, the most important problems were diagnosed, and key stakeholders and their needs were identified. In response to the problems, proposed solutions were advanced.

As part of the revitalisation project, in 2019 two institutions for children, adolescents and families from the revitalisation area were created in the city. In the first stage, the historic building of the former Evangelical chapel was repurposed into a day care facility in the care and specialist formula with a counselling centre for parents. The water tower was also renovated, also with the purpose of fulfilling the tasks of a daily support facility, this time in the form of backyard work with a point for street-workers and party-workers, and a gallery with an educational function. The centres are run by the Polish Scouting Association of Gdańsk Banner. There is also a revitalisation point in Malbork, run by the Social Cooperative Fabryka Inicjatyw, where the residents have a space to talk about the revitalisation of the area. At the revitalisation point, duties are carried out by officials from various institutions, including: MOPS, PCPR, the Labour Office and employees from the Malbork City Hall. All these people introduced the inhabitants to the often complicated regulations, and provided advice and support in filling out often complicated documents.

Other activity undertaken by the city include running integration events such as: Neighbour’s Day, Feast, ul. Grunwaldzka, and competitions like “Dress your city in flowers” for the most beautifully flowered balcony. The city also organises guided walks “On the edge of history and the present day”, which

are walks around the revitalisation area bringing stories and often little known information about the district.

As part of its social activities, the city has organised an educational campaign aimed at students from schools in the area of revitalisation. The scope of activities include meetings, workshops and lectures on violence and addiction prevention in the family, activities reducing the number of offenses most burdensome in public space, and ways to enhance the inclusivity of the disabled. They also talk about violence, cyberbullying, depression, stress, hate speech, youth in times of pandemic, “white gloves” violence and preventive health care. Representatives of institutions and non-governmental organisations that deal



Photo 15. Opening of a day support facility in the water tower.
Source: City Hall in Malbork

with this subject on a daily basis were invited to cooperate, e.g. representatives of the Municipal Social Welfare Centre, the County Police Headquarters, the Municipal Police, the Centre for the Prevention and Therapy of Addiction.

For three years, the Malbork City Hall has also announced competitions for residents of the revitalisation area and non-governmental organisations under the Public Benefit and Volunteer Work Act. Subsidies and grants are part of the cultural, sports and historical activities of the district.

An inspiring challenge for revitalisation is the current development with the participation of residents of the park area, city squares and quarters of backyards, which are to be friendly and meet the expectations of all users of the area. One of the public spaces – 3rd May Square in Malbork - has become

the subject of a deeper expert analysis. A local action group was established therein under the project “City Partnership Initiative Network Revitalisation”. This area will be used for social and cultural activities carried out by the local community. It will be a meeting place for residents, a place for small neighbourhood events and a place for social and inclusive projects.

In 2018, work began on the restoration of 50 historic tenement houses and other residential buildings located in the revitalisation area. Thanks to the involvement of Malbork housing communities and city authorities, the moder-



Photo 16. Classes conducted in a pandemic reality at the facility daily support at 43 Sienkiewicza Street. Source: City Hall in Malbork

nisation of 25 community and 5 municipal buildings has been completed so far. The added value is the fact that the renovation works performed motivate local communities to reach for other, external funds for the development or arrangement of the space around residential buildings.

Families living in the areas included in the border of the revitalisation area can use the services of a day support facility in the form of care and specialist

activity – the Malbork station on “+”, which offers care and activation activities for children aged 7 to 13 for 11 months a year, 5 days a week. The facility organises many educational and therapeutic activities that take into account the individual needs of participants (including learning assistance, workshops developing competences in the field of cultural expression, technical and IT, pre-medical rescue, pro-health; tourist events in the form of trips, organisation of summer and winter recreation). Participants are also provided with a hot meal once a day.



Photo 17. Integrative “Neighbor’s Day” 2021. Source: City Hall in Malbork

Support for young people aged 14 to 19 is enabled in a second day support facility in the form of yard work – the Youth Club “Tower”. The main task of the facility is to give young people a place to meet and spend their free time. The facility provides specialist workshops (including classes in cultural expression, photography and filming, raising mathematical, technical and IT competences, pre-medical rescue courses), tourist events in the form of excursions, as well as summer and winter recreation.

Another form of support offered is the Family Counselling Centre, run by the Municipal Social Welfare Centre of Malbork. As part of the facility, many specialised forms of support are made available, including individual pedagogical and psychological consultations and therapy, speech therapy support, psycho-correction and educational workshops for children and

adolescents, as well as that for parents/legal guardians, support groups). The facility also provides broadly understood support in crisis situations. In the Centre, family consultants take care of participants throughout the entire project period.

The research, polls and statements carried out among the stakeholders show that the inhabitants positively assess the activities undertaken as part of the revitalisation process. This is especially evident through the prism of changes and the possibility of participating in these changes. Conversations with residents about their needs and problems have played the greatest role in the revitalisation of neglected spaces and are appreciated by them. Residents know that they have an impact on the goals of city revitalisation, although four years ago, the idea of meetings in a friendly atmosphere and a small climatic quarter of Sienkiewicza, Orzeszkowa, Sikorskiego and Reymonta streets sounded exotic and innovative. These undertakings were “patronised” by the daily support facility at ul. Sienkiewicza 43, which was the first model of changes not only in the image, but also in the mentality of the inhabitants. Often the events and initiatives organised by it set the tone and made the place take on character, attracting and integrating more and more residents from the area. Events such as “andrzejki”, “mikołajki,” open days, singing scout songs together meant that this place was called the “Factory of Miracles”. The role of the social partner of



Photo 18. Classes conducted at the day support facility at Sienkiewicza street 43.
Source: City Hall in Malbork

the project is not without significance here – the Scout Organisation, working in cooperation with the Malbork Army Unit and using their over 100 years of experience, perfectly fitted in the role of animator of local activities, although at the beginning it was not easy to convince the local community to join in with the activities. With time, these resistances were overcome, and the inhabitants and young people today cannot imagine this space without “their Factory of Miracles”, which is magical.

GOAL 11 SUSTAINABLE CITIES AND COMMUNITIES

The UN's Sustainable Development Goals cover material and social issues that are complementary to each other. They are general goals, which is related to the worldwide scope of their impact. When programming activities, it is difficult to define a uniform demarcation line between the individual goals of sustainable development. The many goals are interrelated. In the case of Goal 11, the directions of development seem to focus on technical and infrastructural activities. Still, it is worth remembering that these activities are intended to directly benefit society, in particular, city communities. It is also worth mentioning that some of the development directions assigned to goal 11 are directly social activities. In each case, the categories proposed below can be developed, bearing in mind that the end result is to always be better and to offer fair living conditions for local communities. This is achieved in cooperation with these communities, in accordance with all the goals of sustainable development.

DEVELOPMENT DIRECTIONS

- **Taking actions to make cities: low-carbon, crisis-resistant, mobile, bio-diverse, economical, efficient, healthy, friendly, innovative, with high economic and social potential and infrastructure;**
- **Satisfying housing needs at a high level and increasing the affordability of housing;**
- **Increasing the variety of housing forms** (in terms of ownership and type of buildings);
- **Minimising the negative impact of urbanised areas on the natural environment;**
- **Reducing pollution in the urban environment**, in particular, reducing the concentration of suspended particulates PM1, PM2.5 and PM10 hazardous to health in the air and reducing greenhouse gas emissions;
- **Leaving open areas and areas of high natural value free of buildings;**

- **Undertaking strategic planning based on diagnosis and forecasts**, ensuring access to all city-forming functions, including basic services (at an appropriate distance);
- **Applying sustainable planning**, taking into account the time horizon, the factor of sustainability, flexibility and resilience, environmental sensitivity and preservation of the urban heritage for future generations;
- **Initiating integrated planning**, development and implementation of comprehensive policies and development strategies focused on people, the environment and the economy;
- **Enabling social participation in city management**, promoting dialogue, cooperation and cohesion and inclusion of local communities; enacting socially integrating spatial planning - which increases the participation of residents in the life of the city, better identifies and responds to social needs and ensures diversity;
- **Ensuring safe life in cities** (safety that is understood in the following dimensions: economic, access to resources, employment and business, environmental, material, law enforcement and protection of people and property);
- Providing all residents with access to an **ecological, fast and reliable transport system**;
- **Adopting sustainable mobility plans with an emphasis on the development of public transport, walking and cycling**;
- **Providing universal access to high-quality green areas and safe public spaces**;
- **Improving the accessibility of services, buildings, public spaces in cities for all social groups and people with special requirements**, especially for: women, children, the elderly and residents with various disabilities;
- **Protecting the cultural and natural heritage of cities, promoting cultural diversity**;
- **Building positive economic, social and natural ties and strengthening cooperation between various sectors within urban centres, between neighbouring areas, metropolitan areas and other cities**;
- **Enhancing the effectiveness of urban centre management**;

- **Developing the central parts of the city**, creating a compact urban structure in the centre and limiting the spread of urban development into the suburbs;
- **Ensuring an adequate infrastructure resource within districts and housing estates.**
- **Maintaining the spatial order** and counteracting the division of space and the fragmentation of the functional and spatial structure of the city.

PRIORITY TARGET GROUPS

- Local government administration and its management staff
- Local government organisational units and economic entities
- Spatial planners
- Urban planners
- Architects
- Conservators of monuments
- Ecologists
- Non-governmental organisations
- Property managers
- Managing commune resources
- Scientific institutions
- Entrepreneurs
- Volunteers

MAIN AREAS OF ACTIVITY

- SATISFYING HOUSING NEEDS AT A HIGH LEVEL AND PROVIDING AFFORDABLE APARTMENTS
- MINIMISING THE ADVERSE IMPACT OF URBAN AREAS ON THE NATURAL ENVIRONMENT
- APPLYING SUSTAINABLE SPACE MANAGEMENT PRACTICES
- FOLLOWING AN ACTIVE TRANSPORT POLICY

Main areas of activity	Actions
<p>SATISFYING HOUSING NEEDS AT A HIGH LEVEL AND PROVIDING AFFORDABLE APARTMENTS</p>	<ul style="list-style-type: none"> • Fostering the emergence of alternative forms of meeting housing needs; • Creating a stock of affordable social housing, including housing for people and families excluded or at risk of social exclusion • Supporting and co-financing the revitalisation of degraded areas in cities, including activities aimed at increasing the condition and improving the standard of used housing resources; • Protecting residents' rights, counteracting rent debts and evictions, assisting people covered by forced eviction; • Reducing the overcrowding of flats and the organisation of municipal offices servicing and facilitating the process of changing flats; • Applying financial incentives to develop housing in the centre of cities to control urban sprawl and reduce infrastructure construction and maintenance expenses; • Counteracting speculation in land and real estate and enabling control of the rental market by the city authorities; • Purchasing and preparing land intended for housing investments; • Introducing provisions to simplify the formal course of the investment procedure; • Researching and forecasting housing needs in the context of managing the commune's resource and annual budget resolutions - increasing funds allocated to housing in the city budgets; • Conducting a strategic and long-term housing policy, creating urban housing development programs for all social groups, in particular, for poorer people and people in difficult life situations; • Introducing a ban/significant restriction on the sale of municipal housing stock by cities;

	<ul style="list-style-type: none"> • Creating social rental housing entities, enhancing their activities; • Involving the community in programming the local housing policy and monitoring its implementation;
<p>MINIMIZING THE ADVERSE IMPACT OF URBAN AREAS ON THE NATURAL ENVIRONMENT</p>	<ul style="list-style-type: none"> • Enacting routine application of environmental impact assessments for investments planned in the city, including housing investments; • Enabling economical and effective use of existing building and infrastructure resources through revitalisation activities, renovation and resource modernisation processes; • Increasing the priority for the revitalisation of the existing urban fabric (e.g. by increasing budgetary resources for this purpose and using available EU funds and programs); • Enabling the use of financial instruments in the revitalisation process (e.g. application of subsidies to thermal modernisation of buildings, co-financing for environmentally friendly projects, organising competitions for ecological construction investments); • Improving the knowledge of the structure and functioning of natural resources and the use of appropriate methods and techniques for the evaluation of the state of the environment through research and implementation of natural and environmental monitoring; • Monitoring the state of air pollution in the city; • Enacting sustainable densification of buildings, regulating the policy of densifying the urban tissue in planning documents (superstructures, adaptations, seals); • Providing urban design aiming at the development of comprehensive urban assumptions, with the background of social infrastructure and services; • Minimising vacancies and micro-urbanisation;
<p>APPLYING SUSTAINABLE SPACE MANAGEMENT PRACTICES</p>	<ul style="list-style-type: none"> • Following integrated urban development planning, including spatial planning with the participation of the local community (involving experts, NGOs, city activists and all residents), which better identifies and responds to social needs;

	<ul style="list-style-type: none"> • Creating databases about the city, including: environmental resources, infrastructure, spatial development and, to the extent possible, finances, and then developing a strategy for effective data management in the city; • Conducting research on the efficiency of land use and analyses of the current development in order to include the economic factor in planning documents and development strategies and to promote sustainable land use; • Observing the principles of protection of resources, Nature and natural and cultural values in spatial planning and urban design; • Planning of cities with a compact urban structure and setting the impassable line of buildings in planning documents; • Planning the implementation of sustainable housing estates, preparing master plans, provision of equipment into infrastructure • Planning cities by taking into account the factor of adaptation to climate change, the construction of passive houses and practising “zero waste”; • Creating new and renovating existing green areas in the city; • Conducting urban planning competitions by the city and architectural projects for the development of urban space;
<p>FOLLOWING AN ACTIVE TRANSPORT POLICY</p>	<ul style="list-style-type: none"> • Developing ecological urban transport; • Calming car traffic in the city; • Investing in the construction of multi-storey car parks; • Restricting the number of parking spaces per apartment (in local plans); • Separating parking free zones in the city and limiting the land intended for parking lots; • Applying financial incentives for the use of green means of transport, e.g. discounts for visitors to municipal cultural institutions who come by public transport, bicycle and on foot; • Ensuring the accessibility of public transport for people with restricted mobility (persons with disabilities, seniors, mothers with children) and in less populated areas.

EXAMPLES OF CITY INITIATIVES

SATISFYING HOUSING NEEDS AT A HIGH LEVEL AND AFFORDABLE APARTMENTS

- **CHEŁMNO** – The city enacted a social housing initiative (SIM) in order to ensure the availability of housing to people who cannot afford to buy or rent a flat on an arm's length basis. Financial support was provided as part of the government housing policy for co-financing the acquisition of shares in the SIM company and for implementing the investment project. Before starting the development of SIM, the city verified the spatial policy and then provided land.
- **STARGARD** - Necessary House – the city tasked the local social housing association (Stargardzkie TBS) with the construction and management of assisted housing that is adapted to the needs of selected social groups (seniors, people with physical and mental disabilities, youth leaving foster care institutions). The Necessary House program was enacted in cooperation with TBS, the city, in particular, social welfare services and with the use of local instruments of housing policy, and non-governmental organisations acting for the assistance and support for people in difficult situations. Tenants, in addition to the possibility of living in a flat arranged to suit their needs, also received - if needed - support services, such as help in independent budget management, rehabilitation classes and training.
- **TURIN** - Homes4All – the city established an innovative company so as to limit crisis situations in housing by promoting revitalisation activities undertaken by social investors. The company deals with: collecting funds from people interested in investing in real estate and a social mission; acquiring cheap real estate and bringing it to full standard, managing private real estate and helping landlords in identifying suitable tenants and in obtaining due benefits from renting, e.g. tax reliefs; supporting tenants through tailored support programs, integration, training, in cooperation with social services and non-governmental organisations.

SUSTAINABLE SPACE MANAGEMENT

- **WROCŁAW** - Nowe Żerniki – The metropolis established a housing estate planned and developed on the basis of a sustainable estate concept, with prepared network, road and social infrastructure, that was systematically de-

veloped in accordance with the principle of diversifying investment forms of housing construction (from developers, through TBS to housing cooperatives) and social mixing of apartment users (tenants and owners).

- **KALISZ** - Local revitalisation plan. In November 2021, the Kalisz City Council adopted the Local Revitalisation Plan for the “Jabłkowski - Podgórze” area in Kalisz. This is the first revitalisation spatial plan in the country that will be enacted only in the revitalisation areas covered by a special revitalisation zone. It is in force on the basis of the principles of local spatial development plans, but it can define more detailed solutions applicable in the area covered by the plan, in terms of architectural solutions and functions. In the local revitalisation plan, it is also possible to: prohibit commercial or service activities on a given property and make commercial investment on undeveloped property conditional on the prior implementation of an investment important for the purposes of municipal revitalisation.

ACTIVE TRANSPORT POLICY

- **JAWORZNO** - Vision Zero - the city has been pursuing a consistent transport policy for many years, using various sources of financing, and has made real investment activities of various scales, such as creating conditions for residents to convert from car to commuting by public transport and bicycle. The current goal - Vision Zero - concerns minimising fatal accidents and other accidents and collisions. At the same time, intensive activities have been carried out to develop public and bicycle transport (attractive tickets, modern bicycle paths). The role of specialists in deciding upon specific solutions introduced in the city is strongly emphasised.

Good practices from Polish cities participating in the “Action Plan for Cities”

Chodzież

As part of the Development Strategy for the City of Chodzież, six projects are planned for the revitalisation of various neglected, undeveloped areas in the city, including parks and residential areas. In the Local Revitalisation Program of the municipal commune in Chodzież for the years 2017-2023 (pp. 68, 77-80), the modernisation of road infrastructure and cubature buildings was recognised as a goal. Actions to this end are aimed at improving the technical condition of roads and sidewalks, as well as modernising public utility buildings and

residential buildings in the revitalisation areas. Therefore, it should be noted that the resulting well-developed spaces will be good background for positive social activities, and will enhance the satisfaction with life in Chodzież, as well as its external image, and encourage tourists to visit the city.

An additional goal of the sustainable development of Chodzież is goal 3: Good health and quality of life. This goal is supported by the activities of the Centre for Active Integration and Rehabilitation carried out in cooperation with the “Hip” Association, which has its seat in the Centre. These are numerous pro-health activities on offer: educational lectures, preventive examinations and basic, daily rehabilitation activities.

The ecological education of the inhabitants is also important for Chodzież, as this will ultimately contribute to raising environmental awareness and developing proper environmental habits. These activities are carried out under the auspices of the Chodzieski Eko Ludek project.

In the areas covered by revitalisation, the road infrastructure has been reconstructed, including access roads, promenades and pavements. Benches and litter-bins have also been installed. The whole has been completed with numerous plantings of greenery and lighting with new street and park lamps. There are playgrounds for children and an outdoor gym, and each area also has small architecture elements related to the porcelain trail - sculptures with elements of cullet and porcelain plates placed along park alleys. Moreover, on Strzelecka street, the so-called ‘Jazz Stars Alley’ pedestals and sculptured musical instruments in the playground, make reference to the tradition of jazz workshops in Chodzież.

A completely new image was given to the park next to the municipal library, the so-called Park “Relax with Culture”. Here, there is an open-air cinema, a place to play chess, a sunbathing area, a fountain and a parking lot. The wall of the library building is decorated with a mural referring to the historical awareness of the city’s inhabitants. In the new park, the historic ‘Tkacki Lamus’ has found its worthy place - a monument from the 18th century, previously located at the back of Nowa Street in Chodzież.

On the *fyrtel* of Stefan Żeromski, two solid waste collection sites were put into use, which affects not only the convenience of the residents, but also the image of the estate. In the course of its construction, the Neighbourhood Social Garden is at an advanced stage of creation, and is to serve the residents as a place of active and passive recreation, as well as a place of integration and neighbourhood initiatives. As part of the social revitalisation in the Żeromski *fyrtel* area, a social economy entity was established - the Centre for Active Integration and Rehabilitation, in which the Hip Association is actively active for



Photo 19. Park “Relax with culture” in Chodzież. Source: Town Hall in Chodzież

the rehabilitation of people after hip arthroplasty. The Centre also enables the integration of the residents of the estate at Żeromski street by offering various types of educational and cultural activities.

Katowice

The city of Katowice has extensive experience in the revitalisation of degraded areas, both in the area of co-implementation of large investment projects, such as the creation of the so-called ‘Katowice Culture Zone’, in the area of the former Katowice Coal Mine, as well as in the field of building strong local communities among residents living in districts with a high concentration of social problems - an example is the revitalisation of the Janów-Nikiszowiec district.

The model locality in Katowice was built thanks to the close cooperation of all stakeholders – government, non-government entities and local people who had shown interest and were willing to take an active part in the process of planning/designing changes in their immediate environment. For this purpose, it was important to create favourable conditions enabling the local community to express its opinion on the scope of needs and ways of satisfying

them, with a simultaneous professional approach to design and presentation and a willingness to consider possible directions of changes in the functions of areas and facilities. In Katowice, the success of this process, which includes not only proposing new functional and spatial solutions, but also developing a development strategy / functional program, is guaranteed by the invitation to cooperate with students of local universities, economics and architectural and urban planning courses as part of study and design workshops. The implementation of student study and design workshops allows for a detailed analysis of problem issues and the provision of the most optimal solutions. Collaboration between the mayor's office and the university and the local community brings many benefits to each of the parties. The detailed mechanism of functioning, the scope of roles and relations between partners constitute the city's good practice in building Katowice as a model locality.

In addition, for several years, the City of Katowice has been implementing and promoting the idea of civic society among its inhabitants. One of the key tools enabling easy and quick involvement in the city's affairs is the KATOCitizen project.

Considering the importance of the involvement of residents in shaping an effective and adequate to the needs of the city development policy, the KATOCitizen project is a tool that can be disseminated among other LGUs and provide inspiration for the development of similar initiatives in the national and international arena.

Leszno

The city of Leszno was one of 20 cities participating in the Model City Revitalisation project. The revitalisation concept as part of the project assumes the creation of a holistic model of sustainable development of the Leszno's city centre, with the instrumental use of degraded post-rail areas. The pilot project consisted of in-depth planning of the activities necessary to bring the centre out of the crisis state, as well as direct educational activities and activities aimed at involving the local community in the revitalisation process. During the project implementation, the city developed a number of concepts and good participatory practices – such as involving residents in space design. One of the model ventures was an architectural competition for the development of Metzsig Square and the New Market Square. The winning entry was selected in an architectural competition co-organised with SARP. The competition was preceded by extensive public consultations with stakeholder groups (over 350 people). Thanks to this, the winning work is a model example of designing

inclusive public spaces. As part of the program of involving residents in planning spatial changes, bicycle consultations were also carried out, the purpose of which was to find critical revitalisation points while cycling. As a result of such meetings, one of the most important streets in the city centre was rebuilt so that it can also be made available to cyclists. The result of the Social Participation program was also the establishment of the Business Station - a space accessible straight from the street and offering a wide range of activities. In addition, as part of the model revitalisation, the city inventoried its tenement houses and on its basis, technical documentation for 13 tenement houses and 36 functional and utility programs were prepared. In the coming years, the city plans to gradually renovate town houses, thus improving the standard of flats in the area of revitalisation.

In 2021, the City of Leszno and its partners create a union of Integrated Territorial Investments (as part of the Leszno Functional Area). Among the tasks under the ITI, Leszno plans to enhance the resistance of Leszno to extreme weather phenomena by building rain collectors and reducing the urban heat island effect by preparing green and blue infrastructure, as well as projects resulting from the Municipal Revitalisation Program – ‘Family Old Town’, the ‘Library Culturally Revitalized’, Culture in the Centre’.

Moreover, since 2014, the City of Leszno has been implementing through the civic budget, projects that address the wishes of its citizens. In 2022, the city will allocate 2.5 million PLN to make real the ideas of residents. The funds will be used, inter alia, in a green market design. As part of this, the budget of the local initiative is also to be launched - in 2022, an amount of PLN 50,000 was allocated for this purpose.

Among the projects fulfilling the directions set out in Objective 11, the following can be mentioned:

- **Leszczyńska Academy of Women**

The main goal of the “Leszczyńska Academy of Women - I go back to work” project is to train, support and activate women in their return to the labour market. A series of workshop meetings that strengthen the competences and skills of women, as well as build their self-esteem and self-confidence were offered. One edition of the Academy has been held so far. During a series of six workshops, under the supervision of a trainer Renata Brukiewicz, the participants strengthened their competences and skills, and built their self-esteem and self-confidence so as to facilitate their return to the labour market. Thanks to the project, those who attended managed to believe in themselves, change their image and even find a job.

• **Neighbourhood Backyard Theatre**

The Neighbourhood Backyard Theatre project involves the comprehensive organisation of outdoor theatre performances for the whole family, in courtyards, squares and other squares in the vicinity of residential buildings located in the area of the revitalisation of the city of Leszno. This activity is aimed at providing informal meetings with art for children, in safe and familiar conditions. Additionally, it is a great opportunity for neighbourhood integration.

• **Circle of Urban Housewives - Cura Domestica**

A series of meetings for women of all ages devoted to the modern understanding of the term “housewife”. The meetings are devoted to discussing the issues of everyday life - in the field of, for example, raising children, running a home, interpersonal relations, ecology and many others. Specialists in a given field participate in the meetings. The participants will also present issues in which they feel they are specialists. In summary, it is a multi-threaded, diverse support group for women.

• **Courtyard common room**

Street clubs are aimed towards satisfying the needs of children, as well as their parents or guardians. The idea of the project is to educate small groups of young people as part of a comprehensive program that is to arouse the interests of participants. Learning through experience is an important element. Each day-room consists of approximately 15 to 20 participants, who have their time organised within the framework of extracurricular and extracurricular activities. The essence of backyard clubs is that they are not assigned to a given place and are intended to fulfil the interests and needs of children and young people. The backyard common room is located where children from the revitalisation area naturally spend their time. Classes are held in small groups, which allows for getting to know the participants and properly diagnosing in which area of development of social competences they need support. The initiator and executor is the KROKUS Socio-Cultural Association.

• **Business Station. Creative Zone**

“Business Station. Creative Zone” is a place supporting the revitalisation process that is run by the Development Department of the City Hall. It is a space in the city centre that serves to animate the community, entrepreneurs

and enterprising people, by organising meetings and practical workshops for residents. The business formula of the Business station, in terms of the numerous events undertaken there, is based on the principle of partnership. The Business station, as the event organiser, does not pay the Station's "partner" for the workshops and meetings performed, thanks to which it is possible to organise the event for residents without charging them for participation. On the other hand, the "partners" of the Business station can self-advertise their services on the profiles of "Business Station" and "Revitalisation Leszno" run in social media (facebook, instagram, linkedin), where their names are mentioned and their logotypes and business profiles appear. Thanks to establishing cooperation with entities operating in Leszno and its vicinity, the Business station organises free workshops, training sessions and meetings that are very popular among the inhabitants of the city and the surrounding area. The Station holds, for example, business speed networking sessions, i.e. quick business dates, language cafes, and has staged events even on learning how to create farm cheese (as part of Cura Domestica).

Moreover, the Business station has become popular as a co-working space. Every day, the Business Station is visited by entrepreneurs who want to use free Wi-Fi, its comfortable work spaces and good coffee.

A municipal real estate office has also been launched at the Station, offering brokerage and networking services between owners of empty commercial premises and potential landlords. Additional roles assumed by the station manager are to update the database of free service premises, help in finding the optimal premises and list available premises resources.

The Business station also acts as a festival office during LUFAs, i.e. the Leszno Street Art Festival, an event co-organised by the city during which art - in any form - goes out onto the street.

"L" magazine

Another innovative idea introduced by the city was to create a magazine entirely devoted to the area of revitalisation - the "L" magazine. "L" - 'Leszno, people and lifestyle'. Several months of work, the cooperation of 160 people, lots of challenges were met and even more good energy was applied. The magazine is entirely devoted to the old town. The intent of "L" is by definition very simple - show the local old town of Leszno from a good, surprising, non-obvious and diverse side, bring residents and tourists closer to the people who create, work, invest here, are simply connected with the centre - and release positive energy. When work started on "L", over 110 places from the old town applied

for participation in the action, and we managed to present about 80 of them in the pages. Through “L”, the inhabitants of Leszno were modelled in the photoshoots, and all items used in these were sourced from local boutiques and stores, while local make-up artists and hairdressers practised their art. The announced casting resulted in over 60 applications. Articles for “L” Magazine were written by journalists from Leszno, and the magazine featured, among others, an artist painter, a university professor, a dancer, local entrepreneurs and many foreigners who were living in Leszno at the time. 3,000,000 copies of the magazine were prepared, and the printing was financed by a private sponsor. The journal was available free of charge and available to everyone. This year, the city plans to release the second edition.

“L” magazine is an example of a new approach to social communication. The new form, great involvement of local communities and a change in the perception of the image of the old town - all this means that the initiative is worth continuing and the city plans to print the next edition in 2022.

The aforementioned activities are aimed at making the City of Leszno a socially inclusive city, while implementing the goals and directions set out in the Municipal Revitalisation Program and in the city’s efforts to achieve SDG 11.

Mikołów

The Mikołów commune conducts a sustainable urban policy, especially in the field of the natural environment and a social inclusion policy through actions for the socially excluded and by involving the city’s inhabitants in the decision-making processes. Actions taken by the commune to improve air quality include investments in the thermal modernisation of the municipal housing stock. The added value of such a project is the improvement of the aesthetics of urban estates and streets. In 2020, the local government of Mikołów implemented many investments of this type. Another activity for the protection of the environment was the adoption of a resolution under which property owners may apply for a subsidy for the implementation of investments consisting in the construction of devices for the retention and use of rainwater and snowmelt at the place of their creation. Mikołów has also created a system of financial incentives for the residents to help reduce emissions from the household and municipal sector. In 2020, the inhabitants of Mikołów, with the participation of funds from the city budget, replaced a total of 186 traditional heat sources with ecological ones. In December 2020, the commune concluded an agreement with the Provincial Fund for Environmental Protection and Water Management, under which it accepted applications for co-financing under

the “Clean Air” Program. Mikołów, together with Katowice and Siemianowice Śląskie, has been a member of the International AWAIR project since 2020, which informs residents about air quality. From April 1, 2020, an exemption from part of the fee for municipal waste management was introduced for the residents of Mikołów in connection with the possession of a composter and their composting bio-waste in it. The exemption applies to owners of real estate developed with single-family residential buildings, and the condition for taking advantage of the partial exemption is the submission of a declaration by the property owner.

For several years now, Mikołów has been running an educational campaign called “Stop Plastik”, initiated in 2019 by Mateusz Handel, the Deputy Mayor. This action is part of a larger campaign consistently implemented by the Mikołów local government under the name “We care for what we have”. As part of the campaign, educational campaigns are carried out in schools, poster campaigns, educational videos are created, and, in addition, city bins for segregation of waste, a city composter in Planty Park and containers for electrowaste segregation have appeared in the city space.

In Mikołów, the City Information System, hereinafter referred to as SIM, was introduced, i.e. a kind of guide to the city space. The introduction of a new city signage system is another element of improving the aesthetics of the city. SIM is a directional, architecturally uniform set of elements that are carriers of public information, including street signs, address and information boards, as well as regulations, city maps, bicycle path markings and direction boards.

For people with special needs, a consultation point was established in Mikołów in 2020. It gave rise to the activity of the municipal “lending room” of basic orthopaedic equipment. “Lending place” is a unique place where residents of the Commune can borrow a wheelchair, rehabilitation crutches or a walker for learning to move free of charge. The commune meets the needs of people with special needs by organising meetings of the Municipal Social Council for People with Disabilities, where the most important issues in the field of various solutions for people with disabilities are discussed. In 2020, the commune took steps to adapt the infrastructure to the needs of people with physical disabilities, taking into account the standards in the implementation of road investments and ensuring that construction investments already at the planning stage had premises for these people. In order to improve the integration of people with disabilities with the society, the commune organises numerous events for people with disabilities (e.g. the Rugby Wheelchair Tournament) and has established cooperation with a sworn sign language interpreter. Whenever possible, sessions of the City Council are translated into sign language. Another



Graphic 7. Sample poster as part of the campaign „We take care of what we have”.

Source: City Hall in Mikołów

Photo 20. Container for the segregation of electro-waste in the Bujaków.

Source: City Hall in Mikołów

unit aimed at preventing social exclusion is the Centre for Social Integration in Mikołów (CSI). It is an organisational unit of the City Hall established to help people who have been unemployed for a long time and would like to find a job and are able to undertake its duties. CSI's mission is to reach every person in Mikołów who is in a difficult social and professional situation, and who is ready to make a change in their life. To achieve this goal, CSI supports participants in the social, emotional and professional area. Participants and instructors, in addition to cleaning and renovation works, jointly run a carpentry workshop, cultivate a vegetable and fruit garden and take care of the first municipal apiary in Mikołów (currently three beehives).

Oświęcim

In order to counteract the process of the outflow of Oświęcim residents to the area of the rural commune surrounding the city and the negative effects of this process, which may include the deterioration of the city's financial situ-

ation, the city has already organised several editions of the “Live in Oświęcim” campaign aimed at attracting new residents. As part of the campaign, which is promoted, among other places, on city billboards, a website was created, where content about the city, its advantages and the residential offer of the primary and secondary market are published. Based on agreements, the website contains links to the websites of developers and real estate brokers who offer real estate located within the city’s administrative borders. As a result, planned and implemented single-family and multi-family housing investments in Oświęcim have become very popular, which proves the effectiveness of the undertaking.

As part of the second edition of the campaign, the developers’ planned and ongoing investment plans were promoted. City billboards show visualisations of development investments with their approximate location. Both in the case of the first and the second edition of the campaign, the promoted investments also included apartments built by the Oświęcim Society for Social Construction - a municipal company offering the purchase of housing units under the deferred ownership system.

In the next edition of this action, the social and economic advantages of the city, such as the offer of reliefs for residents, interesting places for recreation and educational offers, were presented on billboards and on the website. It is also planned to continue the campaign in cyclical installments to attract new residents to the city.

For many years, the Oświęcim self-government has been carrying out activities to enhance the living conditions in the. Investment plans, long-term plans set out in strategic documents and other activities implemented by the municipal self-government involve wide consultation with representatives of the local community. In addition, during public consultations organised as part of the development of local spatial development plans, issues related to areas intended for housing investments are discussed.

Ruda Śląska

Ruda Śląska is an industrial city, the history of which was particularly influenced by the development of hard coal mining and metallurgy. It is situated in Upper Silesia, in the central part of the Silesian Province. Ruda Śląska is a polycentric city, and the inhabitants feel a strong neighbourhood identity. This is a characteristic feature of the city and its community, noticeable in the attitudes and declarations of many residents.

An interesting experience related to the city’s activities, both in the area of the broadly understood strategic planning processes and other activities, are

consultations conducted in the field, e.g. through research walks or by way of the so-called ‘participation tents’. This gives a chance to meet people who live, work, visit relatives and friends, etc. in the areas of interest. These methods allow local government to learn what the local population need and want. The immediate surroundings, especially the courtyards, are very important places for the residents. Concern for the closest common space often manifests itself in spontaneous attempts to arrange this space. The answer to these needs is the Backyard Renovation Program.

In the first stage, the project was carried out in areas of revitalisation. It covered 11 backyards representing basically all types: open - open space, not fenced, easily accessible to the outside, closed - courtyards very clearly separated in the space of residential buildings, semi-closed and inter-block - courtyards located in multi-family, block houses, regardless of the time its inception. During the talks, the residents indicated their needs and ideas for their space. Subsequently, a concept was prepared by an expert and presented to the residents “for approval”. If necessary, corrections were made. In some cases, two concepts were prepared for the selection of residents. These meetings also took place in the backyards. On the basis of the concept developed with the residents, technical designs were prepared for each yard, also taking into account the underground technical infrastructure. During the talks, residents were asked about their readiness to engage in work in their backyard. Residents, where possible, took part in renovation works, e.g. planting plants, tidying up the area, etc. Integration activities were also carried out for backyard communities, e.g. local festivals, games for children and a project of social and professional, educational and cultural activation for people at risk of poverty and social exclusion. As a result of subsequent debates, additional plantings, benches, spring rockers for children were put in place. These activities enjoyed great interest among the local community.

The heaps are part of the landscape of Ruda Śląska, one of them is the post-zinc heap “Antonia Mountain”, located practically in the city centre. Its name was selected in a city-wide competition conducted after the completion of revitalisation. It alludes to the “Antonienhütte” steelworks that operated in the area until the 1890s (‘Huta Antonia’ in Polish). Over the years, the heap has become overgrown with grass, wild bushes and trees. It was not a place that the locals visited as it had a rather bad reputation. In the last couple of years, the heap was revitalized, and in doing so, the technical work stage was preceded by numerous talks with the residents about the development of this place.

Some of the work was carried out as part of the international LUMAT project, which consisted of actions to protect the environment against the release

of hazardous substances. The work involved phytostabilisation and remediation of the soil and the planting of special species of grasses and plants.

W ramach warsztatów poświęconych przekształcaniu przestrzeni, w tym wspomnianej hałdy, narodziła się idea Traktu Rudzkiego. Łączy on za pośrednictwem terenów zielonych centralne dzielnice Rudy Śląskiej: Nowy Bytom i Wirek. W wyniku przeprowadzonych przez miasto prac powstało połączenie pieszo-rowerowe i nowe przestrzenie parkowe, a istniejące parki i skwery odnowiono. Hałda „Góra Antonia” i inne punkty Traktu Rudzkiego, które już zostały zrewitalizowane, to teraz chętnie odwiedzane tereny rekreacyjne mające charakter parkowy o ciekawych rozwiązaniach. Mają one szansę stać się nową wizytówką miasta. Wraz z projektem renowacji podwórek mogą być traktowane jako wzorcowe rozwiązania rewitalizacyjne.

As part of the workshops devoted to the transformation of space, including the aforementioned heap, the idea of the Rudzki Route was born. This route connects the central districts of Ruda Śląska: Nowy Bytom and Wirek through green areas. As a result of the works carried out by the city, a pedestrian and bicycle connection was created, as well as new park spaces, and the existing parks and squares were renovated. The heap “Antonia Mountain” and other points of the Rudzki Route, which have already been revitalized, are now eagerly visited recreational areas of a park character. They have become new showpieces for the city. The charrette workshops conducted in the Orzegów district are another interesting example of local initiatives. These activities were carried out on June 8-10, 2011. Orzegów district has numerous social and spatial problems, and the projects developed there were reflected in reality. In the aforementioned district, a local Centre for Social Initiatives, a sports centre, and a local market were established. In turn, in the Wirek district, MasterClass workshops were



Photo 21. Revitalized heap Antonia Mountain in Ruda Śląska. Source: City Hall in Ruda Śląska



Photo 22. Fragment of a renovated backyard in Ruda Śląska at Sobieski street.
Source: City Hall in Ruda Śląska

held, accompanying the 11th International Conference “City 2017 - City Management”, which took place on November 20-21, 2017. Another example of space-related activity was the project “Urban micro-spaces” (2016, 2017, 2018), which was a joint project of the Silesian Union of Municipalities and Poviats and the Katowice branch of the Society of Polish Town Planners. As part of it, residents and professionals worked on what selected parts of their districts should look like. The talks with the residents did not only concern space, but also, for example, the cultural offer in the city. People from various social groups were thus invited to the workshop “Let’s do it together - only culturally!”, organised by the Municipal Cultural Centre. Microgrants for micro-projects and many other activities involving local communities were an outcome of these meetings. Residents also established a community garden thanks to the help of the Green Cross Poland Foundation.

Rzeszów

The dynamics of the growth of the population of Rzeszów, along with the constantly expanding city territory, pose new challenges for its authorities that were related to progressive urbanisation and the need to provide its inhabitants with a high quality of life. The building an environmentally friendly, safe, affordable city adapted to the needs of the inhabitants takes place through a number of activities, including:

- Building a modern, digital system integrated public transportation system. This has been operating in Rzeszów since 2015 and included three pillars of action:
 1. Reconstructing and expanding the local communication system - almost 9 kilometres of the city's main road arteries have been expanded.
 2. Purchasing a modern bus fleet - 80 modern city buses were purchased.
 3. Designing and implementing the Rzeszów Intelligent Transport System, including: a Public Transport Management System, an E-info Dynamic Passenger Information System, an E-ticket Electronic Public Transport Ticket System and an Area Traffic Control System.

All these elements contributed to the reduction of travel times and the increase in the number of public transport passengers, as well as to the improvement of getting around the city and increasing the safety of all road users.

- Retrofitting transport – purchase of a safe, quiet, modern and ecological bus fleet, adapted to the needs of people with disabilities and with reduced mobility, which will replace the successively phased out the current MPK bus fleet. In the years 2012-2021, a total of 190 comfortable, modern and ecological city buses were purchased, including 90 vehicles powered by natural gas and 10 electric buses. Thanks to the replacement of the rolling stock, the emission of exhaust gases, noise and other environmental nuisances decreased, and the city gained a comfortable and reliable means of public transport fully adapted to the needs of disabled people. Rzeszów's new buses are equipped with position monitoring, cameras, a system for counting passengers getting on and off, ticket machines, a multimedia passenger information system presenting information about subsequent stops, as well as cultural and social announcements. A system of internal and external voice announcements was also put in place, as well as subtitles in Braille for the visually impaired. Passenger-related information is displayed inside the buses, as well as on electronic variable message boards at stops, where bus departure times are revealed. The cameras installed in new buses ensure passenger safety and provide information about the situation inside and outside the vehicle. Each bus is equipped with at least 6 cameras, including as many as 4 of them protecting the passenger space in the vehicle.



Photo 23. Electric bus - fast charging. Source: City Hall in Rzeszów

- Increasing the accessibility of transport for all social groups (including vulnerable groups, i.e. women, children, the elderly, the disabled). Buses have a separate space for wheelchairs with the possibility of fixing them, and separate seats for disabled people accessible directly from the low floor. The voice information system inside and outside the vehicle is a great convenience for the blind and visually impaired. The buttons for signalling the need to stop the vehicle are described in Braille.
- Modern IT systems. The passenger Information System and Electronic Toll Collection (E-Ticket) are the most important elements of the project from the point of view of passengers. Passengers have at their disposal 238 ticket machines (48 stationary and 190 mobile - as at the end of 2021), an online store, and mobile applications for remote ticket purchase. The carrier of the tickets is the Rzeszów city card.
- The Local Railway Station, opened in 2018, includes a waiting room for travellers with toilets and a transport information point for various carriers and means of transport (city, suburban, regional, long-distance buses) and a passenger service point (checkout and complaints), luggage storage and round-the-clock stand of the duty traffic. The pavilion is equipped with a ticket vending machine and an intermodal travel planner, as well as a Kiss & Ride car park and multi-bay roofed bicycle stands.
- As early as 2016, preparatory work for the Rzeszów Transport Centre (hereinafter RCK) was started, including the modernisation of the communication

and pedestrian and bicycle infrastructure in the area of Railway Station Square and the incorporation of public transport stops. The tasks included the creation of an underground car park with access to the PKP platforms, integration of the communication system, construction of safe Kiss & Ride and Bike & Ride car parks, and ensuring communication accessibility for all social groups, especially for people with reduced mobility.

- Replacing the already existing bus shelters/ stop complexes with modern and functional ones that fit into the urban space and use photovoltaic cell power supply technology for various stop elements (certain shelters are also equipped with a photovoltaic installation and a heating and cooling function). The first shelters were replaced in 2016 and this process has been continued to this day.

The indicated investments were co-financed by the European Union, from the European Regional Development Fund under the Operational Program Development of Eastern Poland 2007-2013, as well as under the Operational Program Eastern Poland 2014-2020.

An example of sustainable public construction is the implementation of the Rzeszów Transport Centre, which includes a complex designed in a two-level public layout, where at the “0” level of the current square, the construction of platforms and bus stations with comprehensive equipment is planned, i.e. a public transport stop taking into account transfer platforms and a station for getting off; shelters and bus shelters equipped with benches, information



Photo 24. A bus shelter. Source: City Hall in Rzeszów

boards, monitoring and ticket machines. Roofed bicycle stands are planned to be positioned in the square area, while electric bus charging stations (implemented under the project “Development of the public transport system in Rzeszów”) have already been placed. In the newly designed underground part, the construction of a multi-bay car park for passenger cars, a taxi stand, and an underground access to individual platforms (the scope implemented by PKP) are to be established. The scope of the task will also include the delivery and implementation of the ITS System for RCC, including the adaptation and equipment of technical and service rooms of RCK (floor -1); delivery and implementation of the RCK Management System, including the Passenger Information System; adapting, updating and launching the website for public transport passengers using RCK, delivery, installation and commissioning of passenger information boards and displays (information boards) and electronic passenger information points (infomat), as well as the Intelligent Video Monitoring System (CTTV cameras, recorders, server). The completion of the Rzeszów Communication Centre is scheduled for 2023.

The city of Rzeszów puts emphasis on green public transport. In 2019, 10 12-metre electric buses with charging stations were collected at Lubelska street (10 slow charging stations) and at Grottger street (2 fast charging pylons). In addition, the public transport fleet includes 91 CNG-powered buses (as of the end of 2021).

Tychy

In recent years, the city of Tychy has undertaken a number of activities contributing to the achievement of its sustainable development goals. The city ensures a high level of public, health and environmental safety, which translates into a high quality of life for its inhabitants. This fact is confirmed by the conclusions of the survey conducted in 2021 among Tyszany for the purposes of developing a new Development Strategy for the City of Tychy 2030+. It shows that, in the opinion of the vast majority of respondents (nearly 90%), Tychy is a good place to live. The inhabitants also directly declared that they see an “improvement” or even a “definite improvement” in living conditions in the city (in total, such responses were indicated by as many as 78% of all respondents).

In the City Hall, the catalogue of issues handled electronically was expanded, and the Document and Cases Circulation System was established. A system for the digitisation of archival materials has been in operation since 2018. There is also a network of information kiosks and hot spots in the city. The modern method in city management, i.e. benchmarking, is also being

successfully used. Public services were computerised and a communal services platform was made available.

The city has a rich recreational infrastructure that is available to all residents (modern Municipal Stadium, Mediateka, Tychy Water Park, modernised and expanded recreational base of the Paprocany Recreation Centre). In addition, in recent years, revitalisation activities have been carried out in many parts of the city, including green spaces, housing estates and playgrounds.

Strengthening the development of social capital in the city is supported by implementing projects financed by the European Union, the main objective of which is to direct activities to the development of competences of primary and secondary school students. In 2019, a project addressed to four kindergartens in Tychy (P8, P10, P12, P29) was completed. In addition, in three primary schools in Tychy (Primary School 5, Primary School 11 and Primary School 24), from 2018 to June 2020, additional teaching and remedial classes, based on applying the experimental method, were carried out. In 2019, agreements were also signed for co-financing projects aimed at the modernisation of two vocational/ industrial schools in Tychy (ZS4, ZS7).

The city has obtained funding for a project involving the reconstruction and extension of a former school building (located at Oświęcimska Street) into a multi-family residential building. As part of the project, thirty council



Photo 25. Water playground on Lake Paprocańskie. Source: City Hall in Tychy

flats with parking spaces will be built. The investment will contribute to the improvement of the quality of life of residents at risk of social exclusion, whose income makes it impossible to meet basic housing needs. The undertaking will also improve the technical condition of housing resources and increase their energy efficiency.

Thanks to the implementation of the project “Launching the Centre for Social Services in Tychy”, co-financed from EU funds, activities were promoted in the city to prevent the phenomenon of social exclusion, to which seniors are mainly exposed. Due to the ongoing pandemic, the activities could not be carried out in accordance with the original assumptions and had to be adjusted to the applicable sanitary and epidemiological restrictions. Since its inception, the city has been regarded by town planners and architects as a model case of good spatial planning. Although the current state of knowledge verifies the assumptions adopted in the last century, the city still enjoys interest and a high quality of life. This has been made possible mainly thanks to properly selected investments, for which the city efficiently obtains external subsidies. These are both investments in the modernisation of the technical and communication infrastructure, as well as in the social sphere related to education, culture, sport, recreation and health. Moreover, the key practice of the city is to involve the local community. In continuing this direction, the city aims to create high-quality space, drawing on urban patterns considered today as the best.



GOAL 12 RESPONSIBLE PRODUCTION AND CONSUMPTION

DEVELOPMENT DIRECTIONS

- **Switching to renewable resources and energy sources;**
- **Limiting the consumption of natural resources;**
- **Eliminating the category of waste** - a cradle-to-cradle approach, that is, design and manufacturing products so that they can be recycled at the end of their life - using resources and materials, not consuming them;
- **Optimising the use of raw materials, materials and energy** at all stages of the product life cycle (LCA concept);
- **Striving to increase eco-efficiency**, including energy efficiency (cleaner production concept);
- **Minimising the environmental and carbon footprint of the office / municipality;**
- **Practising sustainable waste management;**
- **Implementing the 9R concept** (refuse - resign, reduce - reduce, reuse / resell - reuse, repair - repair, refurbish - refurbish, remanufacture - redo, re-purpose - give a new use, recycle materials - reuse raw materials, recover energy - recover energy, re-mine - recover from waste);
- **Developing a sharing economy;**
- Undertaking cross-sector cooperation to search for innovative solutions in the field of responsible production and sustainable consumption;
- Building social awareness in the field of sustainable consumption and sustainable lifestyle;
- Creating favourable conditions for the development of the idea of corporate social responsibility and promoting sustainable business practices.

PRIORITY TARGET GROUPS

- Communes
- Public institutions
- Household
- Local society
- Non-governmental organisations
- Entrepreneurs

MAIN AREAS OF ACTIVITY

- IMPLEMENTING A CIRCULAR ECONOMY
- IMPLEMENTING SUSTAINABLE CONSUMPTION
- DEVELOPING RESPONSIBLE PRODUCTION, INCLUDING SUPPORTING NEW BUSINESS MODELS

Main areas of activity	Actions
<p>IMPLEMENTING A CIRCULAR ECONOMY</p>	<ul style="list-style-type: none"> • Developing a sustainable development strategy (e.g. Tampere in Finland) or a circular economy strategy (e.g. Kraków); • Switching to renewable energy sources (e.g. installing renewable energy micro-installations on the roofs of public buildings); • Modernising public utility buildings, increasing energy efficiency and obtaining certificates of sustainable construction (e.g. Ratusz Marszałkowski in Krakow with a BREEAM certificate or a high school in Piastów); • Adopting energy efficiency in regulations concerning new investments in public utility buildings; • Enacting local closing of water circuits by catching rainwater, e.g. for irrigation of public green areas (e.g. a rainwater capture device at the Municipal Office in Wrocław) or washing buses (e.g. Guelph in Canada); • Using product as service lighting for public buildings (Bollnäs in Sweden); • Virtualising through the development of public e-services; • Reducing the production of waste through its re-use and the recovery of raw materials (e.g. as part of joining the Zero Waste Europe program like Capannori without rainfall in Italy); • Implementing the zero waste idea in public institutions and schools (e.g. schools in Palo Alto or the Zero Waste Program in Łódź);

	<ul style="list-style-type: none"> • Collecting organic waste from households and gastronomy to be used in composters located in municipal gardens or to generate energy (e.g. municipal composters using green waste from parks in Warsaw); • Transforming vacant office spaces into apartments (e.g. pioneered by the United Kingdom); • Developing clean, emission-free mobility systems (e.g. buses with hybrid and electric drive or electric car rental, e.g. in Milan); • Providing incentives to use public transport (e.g. free public transport in Giżycko); • Developing bicycle infrastructure that can also be used by cargo bicycles (e.g. Cargonomia in Budapest); • Establishing carpooling systems for employees of public buildings in the commune; • Enacting participatory budgets, taking into account projects in the field of circular economy (e.g. Green Budget in Mikołów);
<p>IMPLEMENTING SUSTAINABLE CONSUMPTION</p>	<ul style="list-style-type: none"> • Extending the life cycle of products by supporting repair points (e.g. by providing space and providing financial and technical support for repair cafes, such as, for example, Repair Café in Piła, or the development of maps of craftsmen, such as the Map of Disappearing Professions in Łódź); • Developing the sharing economy, for example, or the development of city bike systems (e.g. Veturilo in Warsaw); • Promoting the zero waste idea by launching re-use points (e.g. ‘Dividing’ in Poznań or bookcrossing in Warsaw, closing the textile value chain in London) or dedicated online platforms (Austin in the USA) or centres offering only recycled products (e.g. Retuna in Sweden); • Counteracting food waste by supporting the development of the eateries, e.g. by making space available (e.g. the canteen at the Żoliborz District Office in Warsaw);

	<ul style="list-style-type: none"> • Promoting healthy food in places of mass nutrition, and a varied diet with a low proportion of animal products, based on local, seasonal products (e.g. products from sustainable, responsible crops in school canteens in Paris); • Supporting the local culture of food production (urban gardening) by encouraging the establishment of urban gardens (e.g. Rosario in Argentina); • Moving away from plastic by resigning from plastic disposable packaging during city events or by introducing a reusable city cup (e.g. a deposit system for using ReCup reusable cups / bowls in Germany); Building social awareness through actions and social campaigns (e.g. the campaign of Kranowianka Wodociągów Miasta Krakowa);
<p>DEVELOPING RESPONSIBLE PRODUCTION, INCLUDING SUPPORTING NEW BUSINESS MODELS</p>	<ul style="list-style-type: none"> • Applying public procurement policy that takes into account the circular economy criterion (e.g. the circular economy criteria in Rotterdam • in the Netherlands, sustainable in Nantes in France or promoting plastic recycling in Helsinki in Finland or supporting start-ups with a positive impact in Antwerp, Belgium); • Implementing circular economy projects under public-private partnerships (e.g. Radzionków in the Śląskie Voivodeship); • tax breaks (Milan), grants (Valladolid in Spain) or funds (e.g. BruCircle in Brussels) for entrepreneurs operating within the circular economy; • Launching business incubators supporting start-ups with a positive impact (e.g. A Circular Economy Hub in Groningen in the Netherlands or Paris); • Providing consultation and training for entrepreneurs who want to make their business models more circular (e.g. the Resilience Coaching program in Brussels); • Introducing the “pay as you throw away” system in industry and enterprises (e.g. San Jose in the USA or Treviso in Italy); • Creating industrial parks or technology clusters supporting industrial symbiosis (e.g. industrial ecopark in Kalundborg, Denmark, in Kitakyushu in Japan or Rizhao in China); • Promoting entrepreneurs who limit the use of plastics in their supply chain (e.g. Plastic Free initiative in Milan);

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| | <ul style="list-style-type: none">• Giving waste a second life through the cooperation of local government with companies and organisations (e.g. Cais Recycle from Lisbon in Portugal or upcycling by Dekoeko.com). |
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Examples of initiatives in cities

Amsterdam is an example of a circular city. The starting point for activities for the circular economy was the development of The City Circle Scan, to define priority areas in this respect, guaranteeing the achievement of significant progress. The city's approach to circular economy is determined by the strategy for which a dedicated manager is responsible. One of the goals of the Strategy is to reduce the consumption of new raw materials by 50% by 2030 and by 2050 it will become a completely circular city. In its approach to The Amsterdam City Doughnut, the city uses the Kate Raworth doughnut economy, in which it defines 6 main principles, including acting within the cycles of the natural environment.

The city involves stakeholders in its activities - it has developed the Circular Innovation Program with companies and research institutes and Amsterdam Circular: learning by doing with city departments. The city has entered into a ten-year partnership with the Amsterdam Institute for Advanced Metropolitan Solutions to help further develop knowledge about the circular economy.

In 2016-2018, Amsterdam started 70 circular economy projects implemented by companies, research organisations and the municipality itself. One is the switch to zero-emission buses, another is the implementation of the product concept as a lighting service for public buildings (at Schiphol airport). An important element is encouraging companies to feel the idea of circular economy, which the city wants to stimulate through public procurement, subsidies and preferential loans for households to improve energy efficiency, by co-financing low-emission projects or by supporting sustainable construction (in this regard, the Roadmap for Circular Land Tendering has developed 32 Performance criteria and material passports). The city also supports local repair and renovation centres (including repair cafes) and expands facilities to share products with citizens, and runs public awareness campaigns for the circular economy (e.g. 'Amsterdam makes a difference').

Good practices from Polish cities participating in the “Action Plan for Cities”

Elbląg

The vision of the city after 2020, according to the motto, is: “Elbląg in form”, that is, a modern city of opportunities open to the world, full of human aspirations, creativity and entrepreneurship - an innovative city. In implementing the cohesion policy, Elbląg focuses on sustainable development, which promotes a resource-saving, green and competitive economy. In the city’s development plans until 2020, the authorities planned to achieve the 20/20/20 package in the field of climate and energy - reducing CO₂ emissions by 20%, increasing the share of renewable energy sources to 20%, and improving energy efficiency by 20%.

Elbląg implements goals related to the idea of circular economy, among others, through the municipal company Utilisation Works z.o.o. (ZUO), the main task of which is the collection and management of municipal waste in the area covered by the system, as well as through environmental education of the residents. ZUO Elbląg is a municipal installation based on the MBP technology. In the years 2009-2012, the company carried out an investment to expand the plant so as to include the best technological achievements of waste management and the experience of other countries. This was enacted under the banner “Rationalisation of the municipal management system and reclamation of waste landfills in Elbląg”. In 2015, as part of the modernisation, the sorting plant was equipped with new devices, and in 2020, work began on obtaining funds for the modernisation of the existing composting plant. Currently, ZUO Elbląg is implementing a project entitled “Modernisation of the MBP installation in order to conduct organic recycling and preparation for further processes of a waste stream collected selectively”. The reconstruction of the Plant’s infrastructure is to contribute to the achievement of further objectives of improving the condition of the environment and increasing the efficiency of the installation.

ZUO Elbląg practically from the beginning of its existence has been educating residents in the principles of waste segregation and broadly understood environmental protection, such as air protection (reduction of exhaust gases, prevention of waste incineration in domestic stoves, investing in ecological and renewable energy sources), prevention of odours, saving drinking water etc. In order to implement educational activities, the Department created educational materials and teaching aids.

Stakeholders of the urban circular ecosystem are the inhabitants of Elbląg and the neighbouring municipalities covered by the Elbląg municipal installation system in terms of waste collection. The Waste Disposal Plant makes real the concept of a closed-loop economy through the implementation of the ZUO Elbląg investment and the education of residents.

Kraków

A good practice of the city of Krakow was the adoption of the Circular Strategy for Krakow in December 2020. The strategy is part of the national Circular Cities program, the aim of which is to create an individual strategy for introducing a circular economy for cities. The initiative taken is one of the elements of the City's Climate Strategy (under preparation), which provides for the need to increase the quality of life of residents, taking into account environmental conditions. In 2019, the INNOWO Institute for Innovation and Responsible Development and the Metabolic Foundation issued an invitation to its Program to Polish cities. Apart from Krakow, this was taken up by Lublin and Gdańsk.

Work on the Circular Strategy lasted over a year. The project was co-financed by the MAVA Foundation. The preparation of the Strategy is based on two pillars: consultation with local communities and analytical research mainly concerning sustainable development. The research process includes material flow analysis in key sectors, stakeholder assessment and spatial analysis, and aims to identify practical solutions enabling the city's transformation towards a circular economy. This type of management brings large financial savings due to the recovery of unused materials and environmental benefits in the form of CO₂ reduction due to lower production and higher consumption efficiency of the produced raw materials. The second stage of works on the Strategy included the identification of measurable indicators adjusted to the vision of the city's development. The end result of the work was the preparation of a map of spatial typology and a list of specific interventions.

The strategy as a document contains short, content chapters: an introduction with an extension on systemic changes, a part on the presentation of a city model based on an approach to a circular economy, a part on Krakow's resources on which the mentioned type of economy can be built, and finally the vision and action plan of circular economy (divided into four groups and 24 tasks), a case study for business strategies and, last but not least - a detailed overview of the current state of various sectors of Krakow's

economy. The formula of the Strategy is concise and transparent. The interesting, colourful graphic layout of the Strategy that distinguishes individual chapters, makes it easier to understand the content, which is illustrated by photos, diagrams, maps and separate highlight blocks containing the most important information.

The result was a long-term circular strategy with action plans ready to be implemented, the task of which is to drive Krakow towards a circular economy in various sectors of its urban economy.

The most important effect of the implemented program is the receipt of:

- individualised strategy for the implementation of a circular economy, adapted to local conditions,
- in-depth analysis of the current state of waste management in the city,
- a long-term zero-waste strategy covering various areas and sectors,
- key performance indicators,
- an action plan outlining specific business models and the benefits of their implementation.

Cities participating in the program have the opportunity to exchange experiences with national and international partners as part of the networking network of circular cities - Polish Circular Hotspot – which brings together various groups of stakeholders from all over the country (including representatives of science, business, local governments, local government organisations).

Beyond the aforementioned, in 2021, the Institute of Mineral and Energy Economy of the Polish Academy of Sciences developed a “Circular Economy Action Plan for the City of Krakow”. The study is part of the project co-financed by the National Centre for Research and Development as part of the 1st competition for projects open under the Strategic Program for Scientific Research and Development “Social and economic development of Poland in the conditions of globalising markets” GOSPOSTRATEG 2; the acronym of the project being “oto-GOZ”. The aim of the endeavour is to define indicators and prepare an action plan for the Circular Economy for the City of Krakow in the perspective until 2030, taking into account the four areas of implementation of circular economy identified in the “Circular Strategy for Krakow”:

- A city with a circular metabolism,
- An integrated city, managing in a creative and innovative way,
- A city with an ecosystem friendly to people and other species,
- A city containing sustainable, diversified and inclusive construction.

Mszczonów

A good practice in SDG 12 endeavours in the case of Mszczonów is the construction of a Municipal Waste Selective Collection Point (PSZOK), where municipal waste delivered by the inhabitants of the Mszczonów Commune will be collected and stored. For the implementation of the task in 2020, the Mszczonów Commune obtained funding from the Operational Program: Infrastructure and Environment 2014-2020. Priority Axis: Priority Axis II - Environmental Protection, including adaptation to climate change, Measure: Measure 2.2 Municipal waste management. The construction of PSZOK aims to create conditions for the inhabitants of the commune to conduct comprehensive, selective collection of municipal waste. The inhabitants of the commune will select the waste they produce “at source” in order to separate appropriate fractions from them, which they will deliver to the appropriate containers, bins and rooms constituting the equipment of the facility. The construction and subsequent operation of the PSZOK will aim to improve the condition of the natural environment. Through the implementation of the investment, the public awareness of the need to segregate waste, the recovery of secondary raw materials, and the lack of the possibility of landfilling biodegradable waste will increase. The infrastructure necessary to carry out selective waste collection will be provided, residents will be allowed to transfer municipal waste to PSZOK free of charge, the amount of selectively collected waste will increase, the pro-ecological attitude of residents will be developed, the mixing of selectively collected waste will be prevented and the formation of “illegal landfills” stopped. The PSZOK provides for the creation of a collection point and preparation for re-use of used items and waste, in order to practise the circular economy and minimise waste formation.

On the premises of PSZOK, an area of approximately 140 m² paved with crushed stone will be designated for pedestrian traffic for the purposes of an educational path, which will be used mainly by visiting student groups.

Piła

There is a significant potential for re-use of organic waste in the urban environment. Municipal streams of selected waste are an important source of nutrients that can be recovered and then returned to the soil. It is therefore most purposeful and desirable to extract the value present in these waste streams in

the form of nutrients, materials that should be returned to the environment in the form of wholesome and safe products.

Contemporary agricultural practices, incl. intensive cultivation, the use of heavy equipment and large-scale monoculture cropping accelerate erosion and runoff of water that washes away nutrients from the soil that enter into and pollute water systems. The overuse of pesticides and synthetic fertilisers can also increase the toxin content of soils, affecting soil fertility and the ability to support plant growth.

An effective solution to the above problems is the use of organic products, including compost, which is characterised by a high content of nutrients easily accessible to plants. The beneficial effects of high-quality compost have been widely known and have been widely documented. Its use increases the level of organic matter in the soil, improves water retention and biological activity and makes the soil airy and plump.

Unlike mineral fertilisers and manure, compost does not pose a risk of over-fertilisation or environmental pollution. The use of compost is recommended in amateur crops on plots, in home gardens, in organic and large-scale crops.

The biodegradable waste management process can be illustrated by way of one of the largest installations of this type in the country - the Pila composting plant operating at the GWDA Company. The composting process consists in the processing of sewage sludge, as well as bio-waste sorted at the source from the food, paper and wood industries, agricultural waste, green waste and other waste, the composition of which allows for use in the composting process.

The quality of the produced compost strictly depends on the quality of the raw material - the composted waste, and its efficiency is related to the proper selection of process conditions and applied technology.

Composting is a very desirable method of managing biodegradable waste. We encourage all those who have the option of composting green waste, biodegradable waste, with particular emphasis on bio-waste, to use this method of waste management, both in specialised, dedicated installations, as well as on their own in the home garden.

GWDA best practices

GWDA green activity includes:

- An educational cycle for school and preschool children: “You too can become an ECO-hero”, one of the four topics of the cycle is waste management and bio-waste management in home composters. A educational booklet was

published for the purposes of this series: <http://gwda.pl/pl/ty-tez-mozesz-zostac-eko-bohaterem>;

- Environmental education in schools and kindergartens (compost, soil, waste, earthworms);
- Employee initiatives, one of which operates within the framework of the Company – the Recycling Group - the group conducts agricultural and horticultural research on the impact of compost products produced by the GWDA Company (KOMPROL PU and KOMPROL PG) on the growth and development of plants: in the field of vegetable growing, ornamental plants, horticulture, cultivation cereals and grasses;
- information activities on a Facebook fanpage on the occasion of the International Composting Week;
- “Old for “re-used” competition, the aim of which is to promote upcycling (the competition consisted in making practical items using materials that are no longer fit for use);
- “Show us your feeder” competition - participants were to prepare bird feeders produced from recycled materials.

The composting school, on the other hand, is educational in nature, because both children and adults should know that the fact of composting is also associated with much easier, virtually trouble-free segregation of waste and its successive recycling. Therefore, composting has a direct impact on the efficiency of waste segregation, which is currently one of the priorities in the European Union countries.

The project “Shareplace”, initiated by the municipal company GWDA and run by the Shareplace Foundation, taught Piła citizens to live more ecologically, not to waste food or throw unnecessary items into the garbage, and to transfer them for reuse. Volunteers also conducted workshops and educational activities. The principle of the project was not to waste. Accordingly, nothing that is usable should end up in the trash can. The project found new homes for items such as clothes, books, knick-knacks, etc. Shareplace also encouraged the inhabitants of Piła to share food items. Food items that residents were unable to eat could be left in community refrigerators and taken up by those who wanted it. Due to the lack of financing, the project closed after 5 years.

Rybnik

The SDG 12. Responsible consumption and production has become an area of interest in Rybnik in connection with the implementation of the StratKIT - Innovative Strategies for Public Catering (Interreg BSR) project in 2019-2021 (<https://www.stratkit.eu/pl/projekt/>), aimed at implementing the idea of sustainable development in public procurement of food and catering services. Meals are part of the food supply chain, which includes food production, processing, distribution, preparation, consumption and disposal. All of these steps use different resources and have environmental, social and economic impacts: they provide food as an end product, but also create jobs, emit greenhouse gases and change biodiversity. Depending on what the item is and how it is produced, and where it stands in the supply chain, production of the item can be more or less sustainable. As part of the StratKIT project in



Photo 26. StratKIT project - measuring food waste in one of the schools in Rybnik. Source: City Hall in Rybnik

2019-2021 in Rybnik, public meals served in educational institutions and other municipal units (social welfare home, orphanage, etc.) were analysed. In school canteens alone, approx. 10.5 thousand people use public meals every day. These meals have great potential to make the food system more sustainable. Transforming public nutrition can contribute to achieving many of the objectives of the current action plans such as that of Goal 12, 'Responsible production and consumption according to the EU's Green Deal'. These activities will also respond to the Farm to Fork Strategy and ambitions for climate, biodiversity and zero pollution.

In the context of sustainable development, the level of food waste in public kitchens, including educational institutions, is also a problem. The 2018 report of the Federation of Polish Food Banks shows that a single school in Poland throws away as much as 5-6 tons of processed food per year. In 2021, a pilot study of the scale of waste in school canteens and the municipal social welfare home was carried out in Rybnik as part of the StratKIT project. Losses in one of the outlets even reached 33% of production. In the scale of the entire Rybnik, this is several hundred tons of wasted food. The thrown-away food means, among other things, more greenhouse gas emissions to the atmosphere, less water, financial losses and a high social cost.

For several years, Rybnik has also been trying to solve the problem of a large amount of waste resulting from the activities of catering companies - both disposable packaging and unused food.

As part of the StratKIT project, an on-line tool (<https://www.sustainable-public-meal.eu/pl/>) was created, translated into Polish, intended for dieticians, decision makers, gastronomic entrepreneurs, consumers and all stakeholders involved in planning, ordering, preparing and distributing public meals. The Sustainable Public Meal Toolbox allows individuals to create innovative strategies and actions for sustainable public procurement and catering services. Over fifty tools (ideas, inspiration) are available to stakeholders involved in delivering public meals.

Rybnik conducted pilot studies utilising these tools in two educational institutions and the Municipal Social Welfare House. In these institutions, food wastage was reduced by a few percentage points and a series of training courses in nutrition education for employees responsible for preparing meals and - in the case of schools - for teachers responsible for nutrition education, were conducted. Thus, for the first time, measures were taken in the city to reduce food losses. The pilot institutions also conducted culinary workshops promoting the green menu and the EU green public procurement (GPP) criteria. As a result, changes were introduced to significantly increase the diet with a predominance

of plants, including legumes. The diet of the elderly was improved by enriching it with larger amounts of fruit and vegetables, including legumes, the amount of ordered meat was reduced and the quality criteria of the ordered food were raised. Activities towards a healthy and balanced diet in educational institutions and the Municipal Nursing Home are currently being continued and extended to other municipal units as part of the Silesian Innovation Space program. In 2021, inspired by the StratKIT project, a reusable take-out dish was initiated by implementing it in a social economy enterprise - Bistro with Roe.

Warszawa

In Warsaw, the idea of sharing is becoming more and more popular and is beginning to take on more and more innovative forms. Residents share a variety of resources, sometimes for free, sometimes for a fee, but without transferring ownership. The scale and economic and social diversity of the City's inhabitants (their disposition of various material and competence resources) facilitates such activities and allows for the dynamic development of their scale. The sharing economy and circular economy are excellent tools for the development of innovative cities and for building a local community. Activities in these areas can also be an element of intergenerational integration, in particular, through the exchange of experiences between residents with very different approaches to using and possessing things.

Warsaw's activities on the way to achieving SDG 12 include the notion that responsible consumption and production can be divided into two groups. The first is the activities of the City of Warsaw supporting the sustainable functioning of the City. The second group consists of activities of the municipal government aimed at residents and users, as well as companies operating in Warsaw. Virtually all activities and projects enacted by Warsaw can be implemented in cities of various sizes, because they are fully scalable, and most have a typically local or even neighbourhood scale.

The initiatives and activities in the field of the sharing and circular economy are presented in the WawaShare intersectoral project search engine established in 2021. It enables public and private entities to reach a wider audience with information about implemented initiatives. This allows for an increase in the scale of conducted activities and, consequently, for a reduction in the demand for new resources which, instead of being purchased and produced, can be borrowed or collected (usually free of charge or on preferential terms). The search engine provides information on a wide catalogue of resources in areas such as:

- mobility - e.g. of public bicycles, including cargo bicycles, or free bicycle repair places;
- spaces - e.g. Local Activity Places or rooms available for the organisation of social, neighbourhood or cultural events;
- goods - e.g. information on places of exchange, rental or collection of tools, clothes, books, small household appliances and others;
- food - including eateries;
- energy - information on charging points for electric vehicles;
- economic resources - e.g. the project “Handyman for the elderly” or charity shops;
- knowledge and information resources regarding the possibility of involvement in pro-ecological initiatives - e.g. the Warsaw waste search engine “Sort for 5”;
- circular economy - e.g. dividends or recycling points.

The existence of a search engine is convenient for residents who can find in one place, comprehensive information on available resources, as well as projects and initiatives in the field of sharing and the circular economy. The growing number of initiatives on the platform (currently 101) proves the high interest and topicality of needs in this area.

Warsaw is involved in a number of food waste initiatives and supports food redistribution projects. Being aware of the complexity of the challenge related to reducing food waste and observing the amount of fruit and vegetable thrown away after trading days at marketplaces, for 4 years, Warsaw has been developing activities related to not wasting food at marketplaces. The inspiration for their initiation was the *Solidarne Harvest* initiative, under which food suitable for consumption was collected rather than being thrown away, at marketplaces in Paris. The first pilot in Warsaw took place at the marketplace at ul. *Volume* - one of the largest in the city. It was carried out by the Office of the Capital City of Warsaw and the *Foodsharing Warszawa* organisation. At the end of the trading day, volunteers from *Foodsharing Warszawa* went around the stalls in search of food that would no longer be sold, but was still fit for consumption. They then sorted it and made it available to Varsovians in boxes in front of the entrance to the market. Fruit and vegetables that did not find their way to the inhabitants of Warsaw were handed over to one of the eateries in Warsaw.

The success of the first pilot and the positive feedback from buyers and residents made the city convinced that it is worth continuing this activity. In March 2020, a new system for the collection and distribution of food surplus was developed and it was used in the implementation of the next edition of the

pilot program in 2021. The formula of the activities was changed and a legal and organisational framework was given to them. The fundraiser was carried out by the SOS Food Bank in Warsaw, whose offer was selected in an open competition. The food collection carried out in 2021 took place at 3 marketplaces - Wolumen, Hale Mirowskie and Targowisko Bemowo and lasted 19 days. Volunteers who were involved in the collection, collected all produce that was to be thrown away. At the marketplace at ul., the volume of harvested was almost 2 tons of vegetables and fruit, in Hory Mirowskie - about 500 kg, and in the Bemowo market - about 240 kg. In total, almost 3 tons of vegetables and fruit were saved from wasting, which then went to those in need.

The collected food was weighed and recorded by volunteers who worked under the supervision of employees of the SOS Food Bank in Warsaw. After segregation, the collected products were sent to Warsaw organisations supporting people in the homelessness crisis and those in need, including to the Open Doors Association, the Joy Foundation and the Neighbour Aid Centre.

Apart from the direct, most tangible result, which was saving nearly 3 tons of fruit and vegetables from wasting, the project also had an educational dimension. Educational activities were conducted both among buyers and the local community. The path addressed to buyers included handing out leaflets with information about the campaign and discussions about the possibility of donating food to charity. Activities aimed at people who shopped at marketplaces included handing out leaflets with information on how to reduce food waste and educational interviews. About 600 people took part in the educational activities - about 500 leaflets were distributed and talks with about 60 merchants were started. The campaign was carried out in the marketplaces both during food collections and outside them. The educational campaign was also conducted in social media. It included information on collections, recipes for seasonal vegetables and fruits, and materials on preventing food waste. In addition, the Food Bank in Warsaw prepared an e-book that provided information on how to store vegetables and fruits to keep them fresh for longer and information on how to effectively use seasonal products, etc. The e-book was made available free of charge to everyone on social media and on the website www.bzsos.pl.

The pilot of the project would not have been so successful if it were not for the sellers from Warsaw marketplaces being willing to cooperate and help. With each collection, there were more people showing the desire to participate in the action. After the pilot project, there is a huge demand for continuing this type of project, which is why the Capital City of Warsaw will reactivate the project in 2022. It is to be one of the elements of the “EKOcapital - let's not waste food!” Project. The second edition of the pilot program brought further

recommendations that will be included in the activities carried out in 2022. The most important of these is related to the need to improve the coordination of volunteers' activities, as well as to provide better organisation of the disposal of spoiled vegetables and fruit and to enhance the designation of the area for collection, including the storage of the collected food.

Wołomin

Bearing in mind how important waste management is from the point of view of the city's life / operation, the Wołomin commune has for many years been undertaking numerous activities aimed at continuous development and improvement of the municipal waste management system. In 2020, in the commune of Wołomin, it implemented the project "e-Wołomin - Gmina of Good Solutions", which was co-financed by the European Union from the European Regional Development Fund under the Regional Operational Program of the Mazowieckie Voivodeship for 2014-2020. The elements of the project are: PLIP - Information and Payment Platform and Evenio - mobile application - which provide access to the municipal waste collection schedule, along with the possibility of reminding about placing the container, etc. at the roadside (SKM - Mobile Communication System, SGO - Waste Management System). In May 2021, the implementation of the municipal waste identification system using barcodes began. The project includes single-family housing and aims to enhance the waste management and waste segregation system. Barcodes are individual, assigned to a specific declaration. The introduction of such a solution allows for the monitoring of selective waste collection in the commune.



GOAL 13 CLIMATE ACTION

DEVELOPMENT DIRECTIONS

Climate action must be divided into two main groups. The first of these includes projects aimed at limiting the observed climate change, the direction of which is considered dangerous to the successful development of human civilisation. We speak in that case about mitigation activities. The second group of activities concerns the adaptation of both human settlements and certain sectors of the economy (e.g. agriculture) to the inevitable effects of climate change. In this case, we are talking about adaptation. It just so happens that the two groups are not completely separate and some mitigation activities are also activities in the area of adaptation (e.g. increasing wooded areas in cities). This should be borne in mind when analysing the recommendations presented below.

The main goal of mitigation activities is to reduce the emission of the so-called “Greenhouse gases”, mainly carbon dioxide, into the atmosphere and increasing the surface area of areas that can store carbon - especially forests, wetlands, oceans and bodies of water. The main goal of adaptation measures is to adapt the spatial structure of cities and regions, methods of managing municipal economy, health care, education and sectors of the economy that are particularly sensitive from the point of view of climatic conditions (especially agriculture, forestry, construction, water management) to the already observed effects of climate change, manifested in the intensification of extreme weather phenomena, such as heat, torrential rains, violent storms, hurricane winds.

According to the Communication 04/2021 of the Polish Academy of Sciences, cities significantly contribute to the intensification of anthropogenic climate change, constituting “hot spots” on the map of greenhouse gas emissions. Covering only 3% of the Earth’s surface, they are responsible for 60-70% of energy consumption and 75% of carbon emissions. At the same time, cities, and in fact their inhabitants feel the most severely affected by climate change. Their health, quality of life, and often also material goods (e.g. the effects of floods) are at risk. For this reason, measures are already being taken in cities, mainly adaptation. These activities, however, are insufficient and to a large extent apply to large cities (in Poland over 100,000 inhabitants) for which MPA

- Urban Adaptation Plans have been developed. They also do not address the issue of climate change mitigation. Therefore, the implementation of Goal 13 should consist in the consistent implementation of the two basic directions of activities discussed above: mitigation and adaptation.

PRIORITY TARGET GROUPS

The implementation of SDG 13 requires the involvement and coordination of activities of many stakeholders. There is no doubt, however, that in this game, in the case of cities, the “cards are dealt” by their authorities. They have a major impact on the initiation of adaptation measures, and a slightly smaller - although still significant – effect on measures of a mitigating nature.

Hence, the main target groups are:

Group responsible for development planning and city management:

- city authorities: councillors, presidents and mayors,
- employees of offices and municipal companies,
- non-governmental organisations,
- city residents (as long as they engage in the process of establishing local policies),

The group responsible for the implementation of the adopted strategies, plans, programs include:

- designers (architects, landscape architects, engineers in the fields of: transport, construction, water and sewage engineering and energy) and developers
- owners of properties and buildings, cooperatives and housing communities,
- the real estate sector,
- non-governmental organisations,
- city residents (as long as they join the process of implementing the plans of municipal authorities).

The group responsible for scientific, expert and civic support for the implementation of adopted strategies, plans and programs takes in:

- universities and research institutes involved in research and expertise in the field of mitigation and adaptation to climate change, as well as in presenting organisational, engineering and spatial solutions in this area,

- employees of scientific and educational institutions (teachers) (as long as they engage in expert and educational activities),
- non-governmental organisations working to monitor activities to counteract climate change and involved in educational activities,
- city dwellers, including youth and children.

MAIN AREAS OF ACTIVITY

Taking into account the division into mitigation and adaptation measures adopted above, the following main areas of activity should be indicated:

MITIGATION

Actions to reduce the demand for energy - their aim should be to reduce the consumption of energy necessary for the functioning of the city, which in turn will translate into the reduction of greenhouse gas emissions, mainly carbon dioxide. The main areas of activity are: SPATIAL PLANNING, CONSTRUCTION, TRANSPORT and ENERGY.

Striving for gradual change of energy sources – the intent should be to switch to energy sources with low or no carbon dioxide emissions. The main area of activity is ENERGY.

Measures to reduce the mobility of city dwellers - their aim should be to organise the functional and spatial structure of cities in such a way that their inhabitants can reduce the need for movement. The main area of activity here is SPATIAL PLANNING.

Measures to reduce the production of waste and their rational disposal - the aim of this measure from the point of view of minimising climate change should be gradual reduction of greenhouse gas emissions, both directly (i.e. from the process itself) and indirectly (i.e. through energy consumption). The main area of activity here is WASTE MANAGEMENT, considered in the context of CIRCULAR ECONOMY (waste reduction) and EDUCATION.

Carbon storage in the city's natural system - the direction of this measure should be towards maintaining and possibly increasing areas covered with vegetation and water, as well as wetlands - which contributes to reducing the level of carbon dioxide in the atmosphere. The main areas of activity are SPATIAL PLANNING and LANDSCAPE ARCHITECTURE.

ADAPTATION

Creating spatial structures resistant to the effects of climate change - the aim of this measure is to adapt the existing and planned urban structures to

the expected intensification of already observed weather phenomena, such as heat, torrential rains, violent storms, and hurricane winds. In recent years, countering the so-called MWC - urban heat island, minimising the effects of “flash floods” and flooding, and preventing droughts. In this case, the main areas of activity are: SPATIAL PLANNING AND URBAN DESIGN, CONSTRUCTION, LANDSCAPE ARCHITECTURE, WATER MANAGEMENT.

Rationalisation of water management - the aim of this measure is to protect water resources, both surface and groundwater. It should be taken into account that in periods of drought, these resources may turn out to be critical from the point of view of supplying city dwellers. The main areas of activity here are: WATER MANAGEMENT, SPATIAL PLANNING, LANDSCAPE ARCHITECTURE

Preparation of city communities to function in periods of increased threats - the aim of this activity is to increase the awareness of threats, social acceptance of adaptation measures and the ability to efficiently react in the event of climatic threats. The main areas of activity are: EDUCATION, HEALTH CARE, CRISIS MANAGEMENT.

Main areas of activity	Actions
Mitigaion	
ENACTING ACTIONS TO REDUCE THE DEMAND FOR ENERGY	SPATIAL PLANNING and URBAN DESIGN <ul style="list-style-type: none"> • implementing the concept of a “compact city” where possible and justified. By limiting excessive suburbanisation and creating compact spatial structures, the demand for energy is reduced: lower energy consumption by transport (residents, visitors, goods deliveries), less energy losses in transmission networks, less energy needed to heat buildings. CONSTRUCTION <ul style="list-style-type: none"> • improving the energy efficiency of buildings (NZEB Net Zero Energy Buildings / passive housing); • Thermomodernisation of buildings; • using photovoltaic paints in the city (such paint is created • from nano-cells and generates energy through sun exposure, hence, reducing energy consumption and reducing CO2 emissions by more than a half);

	<ul style="list-style-type: none"> • using airgel in construction (airgel is made of air to the extent of 99%, and the insulation quality solves the problem of heat loss when used for insulation of walls and roofs. Its lowering of energy loss reduces CO2 emissions by 29%); • employing “nature-based” solutions (green walls, green roofs with insulating properties); <p>TRANSPORT</p> <ul style="list-style-type: none"> • reducing car traffic to increase the accessibility of public transport, as well as promoting walking and cycling; • offering a diversified and wide program of public transport; • promoting the use of public transport; • improving the quality of public transport and passenger service systems, including building convenient transport and transfer infrastructure; • changing local taxes and transport charges so as to favour the abandonment of individual road transport; • supporting the successive replacement of traditional cars and public means of transport via emission limits for exhaust and particulate matter and replacing these with vehicles meeting higher standards (electric or hybrid cars, hydrogen fueled buses).
<p>CHANGING ENERGY SOURCES</p>	<p>POWER ENGINEERING</p> <ul style="list-style-type: none"> • enacting comprehensive city strategies for the development of low-carbon energy sources, including carbon neutrality plans; • increasing the use of prosumer energy; • supporting smart grids of low-carbon energy sources and conducting research into and the monitoring of the growth of alternative sources in this context; • utilising thermal water resources – providing support in carrying out works and geological works related to the exploration and recognition of thermal water deposits in order to make these available;

	<ul style="list-style-type: none"> • encouraging the use of modern photovoltaic systems and electric storage technologies; • using more environmentally friendly fuels in public transport - e.g. motor gasoline with an increased content of bioethanol (the increase in the content of biocomponents in gasoline contributes to the reduction of greenhouse gas emissions);
<p>REDUCING THE MOBILITY OF CITY INHABITANTS</p>	<p>SPATIAL PLANNING</p> <ul style="list-style-type: none"> • implementing the concept of compact and multi-functional cities, the so-called “15-minute cities” - in the case of larger cities, this translates into the concept of “cities within a city”. Reducing transport needs, e.g. creating automotive-free zones, planning the development of cities so that they incorporate the assumptions of a compact and green city, consisting of halting the spatial expansion of cities (protecting the natural system around cities) and encouraging multi-functional use of city internal structures; • planning of infrastructure and amenities for pedestrians and cyclists;
<p>REDUCING THE PRODUCTION OF WASTE AND ENCOURAGING THEIR RATIONAL DISPOSAL</p>	<p>WASTE MANAGEMENT in the context of a circular economy</p> <ul style="list-style-type: none"> • introducing an extended producer responsibility model in which companies selling and the users of the packaging are fully responsible for the disposal of products and packaging; • supporting activities aimed at reducing the amount and mass of waste, including biodegradable waste deposited in landfills (reduction of methane emissions); • improving selective waste segregation systems and recovering secondary raw materials (hence, reducing the amount of energy necessary to manufacture new products); <p>EDUCATION</p> <ul style="list-style-type: none"> • conducting consumer education aimed at supporting pro-climate consumer attitudes and counteracting the waste of food and other goods, as well as encouraging the development of sharing and sharing systems (e.g. municipal laundries, etc.).

<p>CO₂ STORAGE IN THE CITY'S NATURAL SYSTEM</p>	<p>SPATIAL PLANNING</p> <ul style="list-style-type: none"> implementing the concept of blue and green infrastructure, taking into account the preservation and introduction of large areas of vegetation, especially wooded areas.
<p>ADAPTATION</p>	
<p>CREATING OF SPATIAL STRUCTURES RESISTANT TO THE EFFECTS OF CLIMATE CHANGE</p>	<p>SPATIAL PLANNING AND URBAN DESIGN, LANDSCAPE ARCHITECTURE</p> <ul style="list-style-type: none"> designing multi-functional internal city structures (recycling of space and buildings, revitalisation) with an appropriate share of biologically active areas and with a large share of wooded areas; implementing the concept of blue-green infrastructure at various scales: city, district/buildings, plot, facilities, as this plays a significant role in minimising the problems of rainwater management and the effects of the “urban heat island”; applying good practices in the management of green areas, including reduction of maintenance treatments, use of native species and reduction of mowing.
<p>RATIONALISING WATER MANAGEMENT</p>	<p>SPATIAL PLANNING and URBAN DESIGN, LANDSCAPE ARCHITECTURE</p> <ul style="list-style-type: none"> incorporating the catchment approach in spatial planning and water resource management; increasing the retention capacity of urban catchments and the renewal of water resources, as well as the enhancing flexibility of collective sewage systems (e.g. by linking to surface retention systems); mapping urban floods incidents and counteracting them “at the source”, that is applying water management at the place where precipitation occurs through the use of gray (technical) and blue-green (natural) infrastructure of different scales (from buildings and plots, to city-wide structures); protecting and rehabilitating water ecosystems - streams, rivers, ponds, wetlands, etc. consisting in their reconstruction and naturalisation, especially in place of over-regulation, resulting in the blocking of adaptation processes that are important from the point of view of ecology (e.g. self-cleaning, channel retention, infiltration);

	<ul style="list-style-type: none"> • connecting green areas with rainwater retention areas, which allows, on the one hand, to reduce the effects of sudden rainfall, and on the other hand, to use the water collected during rainfall to regulate the microclimate - mitigate drought and high temperatures - and reduce the costs of maintaining greenery; • increasing the retention on the premises of single-family buildings and the use of accumulated rainwater and snowmelt, e.g. by financing or participating in the costs of purchase, assembly and construction of installations allowing for rainwater management and snowmelt.
<p>PREPARING THE CITY COMMUNITY TO FUNCTION IN PERIODS OF INCREASING THREATS</p>	<p>EDUCATION</p> <ul style="list-style-type: none"> • enacting Information and education activities (e.g. social campaigns, TV and radio broadcasts, competitions and workshops also carried out in the Internet space and in social media); • Supporting non-governmental organisations working to promote activities aimed at solving climate and energy challenges; <p>HEALTHCARE</p> <ul style="list-style-type: none"> • building a neighborhood help system, including activities encouraging residents to take care of vulnerable people in the local community (people with disabilities, the elderly); • supporting non-governmental organisations working to solve climate challenges; • constructing shaded and green playgrounds and modern nurseries; <p>CRISIS MANAGEMENT</p> <ul style="list-style-type: none"> • developing crisis management plans, including storm-water management plans; • constructing or developing a monitoring and warning system for residents against climate-related dangers; • building or developing a data collection system on climate-related hazards and their effects.

Good practices from Polish cities participating in the “Action Plan for Cities”

Gniezno

Gniezno is actively involved in a range of climate-related activities through its participation in various actions, programs and ventures. This includes enacting projects within the blue and green infrastructure. In terms of green infrastructure, they consist in increasing green areas and improving their quality. These areas enhance the quality of local aerosanitary conditions, contribute to the reduction of surface runoff, counteract urban floods, increase the shaded surface of built-up areas and prevent their heating in summer. In the city, revitalisation works for parks are systematically carried out, plants are planted in city squares, and the habitat conditions of trees are improved by enlarging their rooting area by providing biologically active surfaces. As part of the blue infrastructure, one of the forms of counteracting the effects of climate change is the accumulation of rainwater and snowmelt at the place where they occur. Such action brings ecological and economic benefits. On the one hand, rapid surface runoff and urban floods are prevented, especially during heavy summer downpours and torrential rainfalls, and on the other hand - the accumulated rainfall and meltwater is used to water garden plants during drought periods. Gniezno made real this form of water protection by joining the “Catch the rain” program, under which property owners can apply for funding for the construction of systems for the retention and use of rainwater and meltwater.

According to the Report on the state of the Gniezno City Commune for 2020, the following tasks in the field of urban greenery were put into place in the city: Modernisation of the square at ul. Lech / Chrobry; Planting trees and shrubs, along with unsealing the surface at ul. Grzybowo; Revitalisation of the Piastowski Park, along with the development of the entire shore of Jelonek Lake and the district of Speyer; restoring the ditch surrounding the island in the Municipal Park ‘Gen. W. Anders’; planting trees, shrubs and seasonal plants - in total, in 2020, 231 trees, 1,185 ornamental plants and 4,662 seasonal flower seedlings were purchased and planted in 2020. As part of the improvement of habitat conditions in the city centre, 295 trees were released from aggregate previously placed above their root systems.

In 2016-2019, three parks in Gniezno were revitalized. In the first, the Park of President Ryszard Kaczorowski, the work was undertaken in 2016, and 21 trees were planted, as well as shrubs - 1510 pcs, perennials - 936 pcs

and bulbous plants - 110 m². In addition, new grasslands were established on an area of 2218.70 m², while 1207.13 m² of new walking paths were built with permeable mineral surfaces. In the second, Tadeusz Kościuszko Park, revitalized in 2016-2017, 200 trees were pruned, and 62 trees were removed due to being in poor condition or because they interfered with the newly designed paths. Moreover, most of the existing shrubs were removed. However, 22 new trees, 6678 bushes, 830 perennials, creepers and ornamental grasses and 208 m² of bulbous plants that bloom the park in early spring were planted, and 7,839 m² of new grasslands was re-laid. In addition, a total of 3,842.61 m² of new pavements were built. In the third, the Park of Free Cultures, revitalized in 2018, contractors laid out new paths made of mineral pavement, and 53 trees of various species were planted, among others, red horse chestnut, Norway maple, hornbeam, plane tree, small-leaved lime, English oak, Chinese metasquoia and weeping willow. Moreover, 1511 species of shrubs, including Chenaulta 'Hancock' snowball, wrinkled rose, coarse veins, guelder rose, vermiculata, common yew, bouquet hydrangea 'Limelight' were put in place, along with 300 ornamental grasses and 8597 tulip and crocus bulbs. New lawns were also established on an area of over 2.8 ha.

In 2019, three projects were implemented to increase the area of green areas in the city. One was selected for implementation in 2019 as part of the civic budget project "Venice - return to life" and covered a part of Piastowski Park, between streets Jeziorna and Surzięgi, and the Jelonek lake. In the park, new plantings were established, i.e. 35 trees, including 26 linden and 9 oaks, over 1,200 shrubs and ornamental grasses, while 1,260 ground cover plants were rooted on the slopes. In addition, all grassed areas were reseeded. The second task was to revitalize Stanisław Wyspiański Square in Gniezno, where lawns were established on an area of 825 square metres, and 130 ornamental shrubs and 300 square metres of bulbs were planted. The third task was to plant trees and shrubs along Bolesław Chrobry street in the section from Mieszko I street to Łubieński and Dąbrówki streets.

The most important activities implemented in 2020 under the Low-Emission Economy Plan for the City of Gniezno were:

- 1) Removing low emission sources in the City of Gniezno under the "Better air quality in Gniezno" program. In total, 109 solid-fuel heating sources were removed in 60 apartments and 7 single-family residential buildings;
- 2) Eliminating low emission sources in the city of Gniezno in municipal residential buildings. In the building at ul. Libelta 56, 12 solid fuel heat sources were exchanged for better heat sources. In addition, 10 solid fuel heat sources were removed from 7 premises and electric convector heaters were installed.

This allowed reducing the emission of PM10 dust by 414.9 kg / year, PM2.5 by 311.2 kg / year and benzo (a) pyrene by 0.155 kg / year;

- 3) Constructing the Park & Ride car park at ul. Wrzesińska (101 parking spaces);
- 4) Promoting a low-emission economy - educational activities (competitions in educational institutions, information leaflets, posters, City Guide).

As part of measures to reduce low emissions, the National Fund for Environmental Protection and Water Management in Gniezno in April 15, this year, will launch the fourth call for applications for natural persons in the popular program “My Electricity”. The support will apply not only to home photovoltaic (PV) micro-installations, but also energy and heat storage, which will increase the self-consumption of electricity generated from owned PV panels.

Kielce

In response to the progressive climate change and the significant coverage of the city with legally protected areas and being susceptible to anthropopressure, the City of Kielce has identified as a priority, actions contributing to building resilience to possible crises related to the urban environment through developing of blue-green infrastructure that is easily accessible to every inhabitant, and by building a complete and frequently updated knowledge base on the environment and local climatic conditions. This challenge is closely related to sustainable and balanced land use.

The main activity was to develop and then adopt the Plan of Adaptation to Climate Change for the City of Kielce until 2030. This has become the basis for a number of organisational, investment and decision-making activities in the City.

In 2020, the “Catch the rain” project was implemented, which consisted in equipping some schools, kindergartens, nurseries and social care homes with rainwater tanks. The aim of the project was to familiarise children, adolescents and the elderly with methods of economical and rational management of water resources, consisting of retaining and collecting as much rainwater as possible at the place where it is generated and the possibilities of its subsequent use inside and outside the building. A similar project was carried out with the residents in mind, providing funding for the construction of rainwater retention devices for nearly 60 private properties. The project enjoyed great interest among the inhabitants of Kielce.

A botanical garden has been operating in Kielce for several years. The project aims not only to protect geological and natural heritage, but is also closely related to scientific activities, through cooperation with local universities,



Photo 27. The Silnica Valley Corridor as an element building the blue and green infrastructure of the city. Source: S. Rakowski

especially with the University of Jan Kochanowski. A gene bank of endangered, protected and rare species is being built successively by establishing numerous conservation collections. The functioning of the facility also influences the economic growth of Kielce and the region, favouring the development of the tourism and recreation sector based on endogenous natural heritage resources and traces of the historic mining industry of Kielce, as well as by displaying in one place the unique values of biological diversity of the region's natural resources.

The City of Kielce simultaneously implements many educational projects in the field of air and climate protection in the form of workshops, conferences, meetings, competitions, guides, workshops and other materials addressed to all age groups. Over the last few years, nearly 30 such initiatives can be mentioned, including "With energy for KLIMATU", "Environment above all", "Safe Senior 2020".

In the area of Objective 13 - Climate action, Kielce has built a system of city sensors that continuously monitors the air quality in the city, as well as its climatic conditions (including temperature and humidity). As previously noted, the city of Kielce systematically supports the development of activities aimed at rainwater retention. This direction will certainly be continued. There

is also a gradual change in the approach to spatial management. The newly developed local plans take into account the provisions resulting directly from the recommendations contained in the Plan for Adaptation to Climate Change of the City of Kielce until 2035, including increasing the share of biologically active areas in construction areas. In addition, protection plans are being developed to strengthen the existing blue-green areas, while new blue-green infrastructure is being created in Kielce.

Świdnik

As part of enhancing the adaptation capacity of Świdnik to climate change, in 2022, the employees of the Ecology and Greenery Department of the City Hall sowed about 1,100 sq m of flower meadows along the main arteries of the city, using a mixture of seeds called “Carpet of flowers”. Meadow flowerbeds will also appear in June along streets Wyszyńskiego, Niepodległości and at the Rose Garden next to Norwida 3 street. The last place was the result of a request by the inhabitants of nearby blocks of flats, who in 2020 sowed the site with colourful mixtures of flowers themselves. It should be noted that, at the turn of April and May, the ornamental fruit trees planted in Świdnik in previous years, including plums, cherries, pears and apple trees usually start to flower, and along Wyszyński street, white small-berry pear “Chanticleer”, apple tree “Ola” with pink flowers and scarlet “Royalty” are to be found in bloom at this time. Moreover, along Wyspiański street, one’s eyes are delighted by seeing the row of “Pissardia” cherry plums bearing pink blossoms. The city also sowed flower meadows in 2018 in the square between Hala Targowa and Okulickiego street (the seeds were a mixture called “Romantic flower bed”) and in the roundabout at the intersection of Traugutt street, as well as in the green belt separating the fragment of Raclawicka street to the intersection with Lotników Polskich street (these seeds from a mixture called “Summer Flower Charm”). In this undertaking, initially, an experimental selection of species was introduced - annual plants, to check which plants would work best in the city in terms of resistance to drought, flowering length, etc. The area of 400 square metres was then sown with the recommended meadow flowers. The bed was doubled the following year.

In addition, the city undertakes a number of other initiatives that have a positive impact on the life of insects, e.g. building beehives. In June 2019, the mayor of the city signed the Manifesto of Beekeeping-Friendly Communes. Thus, Świdnik received the status of a “Bee-Friendly Commune”, which is a quality mark and confirmation of the city’s brand, which is socially and

environmentally conscious and actively works to preserve biodiversity. This status means carrying out educational activities, mainly for fruit farmers and gardeners, and establishing natural habitats for bees. The presence of these useful insects is taken into account in almost every urban investment where there is also a place for greenery. This is supervised by the Department of Ecology and Greenery, which proposes new initiatives for these beneficial insects.

As part of reducing low emissions in Świdnik, the project “Modernisation of the existing lighting into energy-efficient lighting in the Świdnik City Commune”, worth nearly PLN 1.7 million, was implemented. Accordingly, 138 damaged poles were replaced and 1,141 sodium luminaires were exchanged for energy-saving LEDs with a programmable 5-step power reduction. Of these, 21 lamps are equipped with controllers enabling the reduction of the luminaire power. As part of this initiative, 52 street lighting cabinets with a remote system of intelligent lighting control with data transmission were put in place. The new system will allow controlling the lamp lighting time through remote settings of the astronomical clock, hence, saving energy and providing savings in maintenance costs.

In terms of goal 13, sowing April meadows is a good practice of the city and began in 2018. The areas sown with natural mixtures are not difficult to maintain, they only require watering and possibly a single mowing. Importantly, such areas quickly become an enclave for insects, especially pollinators. Another good practice of the city is to consider a place for bee-friendly planting in each new investment concerning urban space (playgrounds, squares, etc.) and to place insect houses in such places.

Wrocław

The intent to counteract climate change is evident at every stage of city management - from strategic and planning documents, to the implementation of urban projects and programs, in which, for example, Wrocław uses blue and green infrastructure as a tool to combat climate change. The city applies the experience gained in subsequent projects, creates teaching materials, e.g. catalogues of good solutions, and disseminates the acquired knowledge among designers and residents. In Wrocław, programs that can be described as “good city practices” are successfully implemented, including the “Catch the rain” and “I like the rain” programs.

The program “Catch the rain”, of which 3 editions have already been carried out, is a subsidy program that allows obtaining funding for the implementation

of installations for retaining rainwater in the place of its fall. Examples of such installations are barrels for rainwater, rain gardens and absorbent pits.

The first, pilot edition of the “Catch the Rain” program, organised in August 2019, turned out to be a success. The interest was so great (as many as 143 applications were submitted for a total value of PLN 600,000 - editor’s note) that after a few days of its duration, it was decided to increase the pool of funds from the initial PLN 80,000 to PLN 250,000. As a result, nearly 100 applications were completed. The average value of the subsidy was PLN 2,990.

The next edition of the Catch the Rain program was launched in February 2020, and 363 applications were submitted, of which 18 qualified. In total, in 2020, Wrocław allocated about 700,000 PLN for the program. As a result, 202 rain systems that were installed, including:

- 9 rain gardens,
- 4 absorption wells,
- 126 ground tanks taking in gutter water,
- 63 underground tanks for rainwater.

The obtained environmental effect: approx. 440 m³, in 2019, it was approx. 150 m³.

In Wrocław, property-owners can apply for co-financing up to 80% of the costs incurred for the implementation of the task, with the upper limit of PLN 5,000. However, in the case of cooperatives and communities, the maximum amount of the subsidy was set at the level of PLN 10,000.

A useful tool is a calculator with which residents can calculate the amount of rainwater retained. After entering the data on the roof area, the size of paths or terraces, the user will receive information about the capacity of the tank to be installed.

As for water retention activities, the city also runs an educational program “I like rain” aimed at students from educational establishments. The program consists in the joint creation of rain gardens in selected facilities in the form of workshops. In 2019, the workshops were held in cooperation with the Sendzimir Foundation in 10 institutions - at schools and kindergartens and at the Nursing Home.

In 2021, the program was extended in cooperation with the Landscape Architecture Association to another 8 educational institutions. The city is also trying to obtain external funds for its activities. As an outcome of this activity, the “Grow Green” project is being funded by the European Commission’s Horizon 2020 framework program. The project aims to adapt the city to climate change, by creating a catalogue of demonstration solutions to provide shelter



Photo. 28. 29. Ogrody deszczowe źródło: UM we Wrocławiu

from heat, as well as to enhance local temperature reduction, improve air quality and enable the use of rainwater.

As part of the project, 7 “pocket parks” were established in the back-courts of Ołbin in Wrocław and the “green street” of Daszyński, on which 41 trees, 913 shrubs and 369 vines were planted. As a result of the investments, neglected and concreted back-courts became filled with greenery, and residents gained recreation places and installations for managing rainwater. Biodiversity has also not been forgotten. As part of the project, Nature-based solutions are being implemented, i.e. solutions that are profitable (economically efficient), and at the same time provide ecological, economic and social benefits, and support adaptation to climate change (<https://www.wroclaw.pl/growgreen/>).

Activities that proved successful under the GrowGreen project or the “Gray to green” program have been extended to another program, this time dedicated to cultural institutions. In 2021, the pilot project “Green Culture” was launched. Accordingly, cultural institutions can apply for funding of up to PLN 20,000 for activities related to blue and green infrastructure that are designed to:

- increase the city’s resilience to climate change,
- enhance local rainwater management,
- extend biodiversity.

The intent of this program of activities is to bring about improvement in the environmental conditions within Wrocław cultural institutions. As part of the allocated funds, the landscape around them is being improved: rainwater tanks are being installed, asphalt surfaces broken up, rain gardens, flower meadows, community gardens, green trellises, beehives, houses for hedgehogs and pollinators are being established. Moreover, the buildings are being renovated, and are being modified to include green walls (climbers), green roofs, drinkers and other changes that are in line with MPA recommendations.



GOAL 14 LIFE BELOW WATER

Goal 14 is extremely important from the point of view of Poland's geographical location on the Baltic Sea and the possibility of its use (economic, economic, transport, environmental, tourist and recreational). Due to the ever-increasing anthropopressure, it is necessary to try to maintain its best possible condition, physically, biologically and qualitatively. It is also important to maintain in good condition the Baltic Sea coastal zone and the hinterland, from which numerous pollutants flow to the sea through the hydrographic system. One should also not forget about the possible impact on the state of the Baltic waters of the ships that sail on it in so many ways. In this case, it may concern their collision or failure or their direct discharges of pollutants, e.g. bilge water. On the other hand, good economic use of the sea guarantees the economic development of many countries. Therefore, it is worth developing numerous industrial sea-related activities, including those related to fishing, trans-shipment or shipbuilding. Apart from the element of water quality, it is important to preserve or even enhance current biodiversity. In this case, this concerns not only attempts to improve the current state of biodiversity itself, but also the possibility of revitalising selected water objects in terms of improving their quality and the condition of the environment. It is also important to support the environment in the proper development of biological life and to continue to monitor its quality in terms of overfishing, introduction of alien species and contamination. In connection with the last point, proper farming is important, which nowadays, apart from social and living and industrial pollution, most significantly affects the supply of too large amounts of nutrients in the form of run-off into the sea. This applies not only to conducted farming in the immediate coastal zone of the southern Baltic Sea, but also in inland areas which discharge these pollutants through the hydrographic system, e.g. the Vistula River. Naturally valuable areas, such as Natura 2000 sites, are particularly important in this context. The possibility of enhancing the retention condition of a given place is also crucial, as this is associated with improving its "resistance" to the phenomenon of inundation or flooding. Therefore, it is only through practising sustainable development that it will be possible to maintain the biodiversity and health of the Baltic Sea.

DEVELOPMENT DIRECTIONS

- **Improving the biodiversity of the Baltic Sea** by eliminating pollutants such as: foreign substances, waste and oil, as well as plastic and microplastics. It is crucially importance in this context to ensure a reduction of the input of nutrients (nitrogen compounds and phosphorus), as these cause uncontrolled growth of harmful organisms, e.g. cyanobacteria, and the progressive phenomenon of eutrophication. This is important because in the era of climate change, that most vulnerable to change are the plant and animal species associated with aquatic habitats. In this direction, it is also important to regulate the issue of overfishing and to protect against the introduction of alien species intentionally or accidentally;
- **Developing blue and green infrastructure in coastal cities** by restoring biologically active surfaces and local managing effectively local rainwater sources, it is possible to improve the qualitative and biological status of waters in the analysed cities. This will have a very positive effect on the conditions in the Baltic Sea itself. At the same time it will protect to some extent the coastal zone before the flash flood phenomenon;
- **Creating new green areas in the catchment areas of the coastal zone** will make it possible to reduce the phenomenon of flooding (especially in cities) and will lead to the improvement of water circulation in individual catchments, and will also reduce the inflow of pollutants to the main receiver (recipient), which is the Baltic Sea;
- **Bringing damaged areas or degraded ecosystems back to life (revitalisation)**. This is the process of transforming poor systems into rich ones. The action applies not only to natural elements strongly transformed by man, including those of natural value, but also to anthropogenic areas (social revitalisation), e.g. port areas, shipyards, etc.;
- **Reducing the influx of nutrients into the Baltic Sea and monitoring the condition of habitats in the Sea and its coastal zones;**
- **Improving the quality of the waters flowing into the Baltic Sea, as well as the waters of the coastal zone. In addition, eliminating pollution sources in the waters flowing in from the land zone and that produced directly in the Baltic Sea itself;**
- **Enforcing the provisions regulating the issues of marine water pollution** from industrial sources, municipal economies and agriculture;
- **Developing sustainable fisheries and the Polish fish processing sector;**
- **Ensuring compliance with the postulates of the Convention on the Protection of the Marine Environment of the Baltic Sea Area;**

- **Protecting the resources of the Baltic Sea** and creating - including marine areas - networks of Natura 2000 nature protection areas;
- **Improving integrated coastal zone management** - developing conservation strategies and cooperating with entities managing the catchment, river basin and coastal areas;
- **Researching and monitoring marine and coastal waters** to raise knowledge of the condition of habitats in the Baltic Sea and its coastal zones;
- **Assuring efficient and sustainable use of marine resources** for various social and economic purposes, while enhancing the sustainability of non-renewable resources and natural processes in the perspective of current and future generations;
- **Ensuring the coherent management and use of the resources** of the Baltic Sea and maritime and coastal areas, including the coordination of activities of various entities;
- **Increasing employment in the maritime economy**;
- **Ensuring and improving maritime safety, including in the context of the MARPOL Convention Standards and the Helsinki Convention** concerning the transport of petroleum substances;
- **Carrying out construction investments covering coastal areas** based on large-scale urban projects (to minimise and mitigate impacts on marine ecosystems);
- **Reducing the harmful effects of carbon dioxide emissions** from transport, households, industry, agriculture, trade and services, as well as anthropogenically transformed peatlands on seas and marine resources;
- **Creating accessible water fronts**, i.e. revitalisation of areas located by a natural water reservoir, lake, river or sea. It allows the opening of urban spaces to water;
- **Assessing the impact of the pollution of the Baltic Sea on the ecological safety of the Polish EEZ** (Exclusive Economic Zone);
- **Constructing or reconstructing hydrotechnical infrastructure in the maritime and coastal zone** so as to provide protection against the phenomenon of flooding from the sea;
- **Developing tourism and recreation potential**, including the development of water sports in the coastal and maritime zones;
- **Improving the condition of sea mammal and bird habitats**, e.g. concerning the active protection of ringed plover, reducing disturbance to seals by

humans in their breeding places, providing rehabilitation to injured animals, protecting porpoises and other rare and endangered sea animals;

- Conducting broadly understood **ecological education based on the natural and cultural values** of a given place, by creating blue schools;
- **Recognising the habitats of rare species of animals and their protection** (for scientific and economics reasons).

PRIORITY TARGET GROUPS

- Fishermen
- Enterprises that harvest marine organisms
- Farmers in the Baltic Sea region
- Inhabitants of the Baltic Sea region
- Sea and ocean experts
- Officials
- Technical staff
- Universities and research and development institutions
- Non-governmental organisations
- Representatives of the fishing industry
- Representatives of the food and processing industries
- Industry associations
- Local and regional institutions dealing with remediation
- Local (city) administration
- Schools

MAIN AREAS OF ACTIVITY

- Improving the biodiversity of the Baltic Sea;
- Improving water quality (eliminating pollution sources);
- Reclaiming degraded areas;
- Supporting the maritime and port economy;
- Protecting the Baltic Sea and its hinterland (through research and science, sharing knowledge, popularising good practices);
- Enacting ecologically sound Economic and economic development of the coastal zone.

Main areas of activity	Actions
<p>IMPROVING THE BIODIVERSITY OF THE BALTIC SEA</p>	<ul style="list-style-type: none"> • Eliminating overfishing and by-catch of fish; • Eliminating illegal fishing; • Applying bans on introducing alien species into the sea; • Providing effective management of protected areas; • Introducing and adding value to water ecosystem services; • Ensuring a reduction in the inflow of nutrients, causing the uncontrolled growth of harmful organisms, such as cyanobacteria, and disruptions in biodiversity; • Limiting the inflow of solid and liquid pollutants; • Limiting the phenomenon of eutrophication; • Building green infrastructure; • Improving the condition of marine fauna and flora (application of active protection).
<p>IMPROVING WATER QUALITY (ELIMINATING POLLUTION SOURCES)</p>	<ul style="list-style-type: none"> • Preventing and reducing pollution in the Baltic Sea (pollutants, domestic and industrial waste and oil from ships, as well as plastic and microplastics); • Recycling plastic materials • Implementing investments in tertiary wastewater treatment, reducing the levels of runoff of nutrients and pollution to the Baltic Sea from the territory of Poland; • Protecting against eutrophication, applying measures to balance agriculture in the areas adjacent to the Baltic Sea as well as in connecting lakes and line features (rivers and canals); • Conducting responsible management of industrial and agricultural waste; • Developing effective wastewater management plans in individual cities and towns; • Implementing integrated water resource management and programs for capturing, processing (cleaning) and re-using runoff rainwater from urban areas; • Undertaking initiatives aimed at direct reduction of litter in waterways - e.g. Operation Clean River 2021, fishing and the use of connected drainage systems and sewage systems for water purification; • Installing industrial filters to reduce dust emissions

	<ul style="list-style-type: none"> • and gases (reducing pollutants entering as aerosols); • Enhancing the use of renewable energy sources – by constructing hydro and wind power plants (also in the open sea), as well as utilising photovoltaic technology; • Enacting changes in the agricultural economy, e.g. reducing the use of artificial fertilisers; • Reducing or eliminating pollutants produced in the Baltic Sea (ship control); • Monitoring the quality status of surface waters.
<p>RECLAIMING DEGRADED AREAS</p>	<ul style="list-style-type: none"> • Revitalising damaged areas or degraded ecosystems - rivers, lakes; • Providing social rehabilitation, e.g. in port areas or shipyards located by the sea or areas located directly on a river or lake; • Creating new green areas in cities; • Creating green and blue infrastructure in cities • Creating accessible water fronts;
<p>SUPPORTING THE MARITIME AND PORT ECONOMY</p>	<ul style="list-style-type: none"> • Providing support for the creation of new jobs in the fisheries sector; • Diversifying the economy in coastal communities; • Strengthening the economic position of Polish sea-ports; • Developing and undertaking investments related to port infrastructure, construction of terminals, access infrastructure to seaports from the sea and land, river routes, road and rail corridors; • Constructing of motorways of the sea and intermodal infrastructure; • Developing port facilities; • Increasing the competitiveness of maritime transport; • Implementing integrated and innovative business models and transfer of economic knowledge, including intensification of involvement and cooperation between the private sector and the public Baltic-Adriatic corridor; • Providing financial support for sustainable sea processing; • Revitalising sea quays, improving their accessibility and attractiveness for residents; • Conducting sustainable, perspective investments in coastal areas; • Implementing comprehensive aquaculture and fisheries policy and integrating urban areas;

	<ul style="list-style-type: none"> • Introducing a certification system for restaurants serving products from sustainable sources of fish fishing; • Developing tourism and recreation in the coastal zones of the Baltic Sea.
<p>PROTECTING THE BALTIC SEA AND ITS HINTERLAND (THROUGH RESEARCH AND SCIENCE, SHARING KNOWLEDGE, POPULARISING GOOD PRACTICES)</p>	<ul style="list-style-type: none"> • Applying innovative, research-based solutions for a “healthy” Baltic Sea, the water ecosystem and the communities that depend on it; • Conducting research on the marine ecosystem and strengthening the research potential and scientific knowledge on the impact of rivers on the sea; • Enacting sustainable and effective management of marine ecosystems and coastal; • Using popularisation and educational activities to enhance the biodiversity of the Baltic Sea and to bring about the better quality of its waters; • Undertaking activities to enhance the protection and sustainable use of the Baltic Sea resources, including water • Conducting educational activities in the field of culture, conservation and use of water resources - including popularisation of good, ecological sound drainage practices and wastewater treatment; • Increasing common knowledge of the role of the seas and aquatic ecosystems in sustainable cities and communities; • Encouraging residents to respect sustainable fishing practices by making ethical purchases; • Conserving other marine and coastal areas and demanding their inclusion in the Natura 2000 network; • Supporting Blue Schools; • Recognising the habitats of rare species of animals and providing for their protection.
<p>ENACTING ECOLOGICALLY SOUND ECONOMIC AND ECONOMIC DEVELOPMENT OF THE COASTAL ZONE</p>	<ul style="list-style-type: none"> • Practising sustainable fisheries and rejuvenating the Polish fish processing sector; • Developing Poland’s small and large seaports; • Resurrecting Poland’s shipbuilding industry and economic sectors cooperating with it; • Enacting integrated coastal zone and sea management; • Ensuring efficient and sustainable use of marine resources for various purposes.

Examples of effective sea oriented initiatives undertaken by coastal cities

Projects implemented by the sea station in Hel

One such initiative is the “Blue Village” in Park Wydmowy and, where the House of the Porpoise (a museum dedicated to the Baltic dolphin) and “network house” (a place for meetings and lectures) were established in the former seaside forester’s lodge. The project also had the intent of revitalising the vegetation of the dunes surrounding the facility. Accordingly, alien species such as the wrinkled rose were removed, and the typical vegetation of this place was re-established. Another project that has been carried out since 2001 is that of the restitution of the gray seal habitat in the southern Baltic Sea. Apart from the seals, Baltic porpoises are an important research object. For example, the SAMBAH (Static Acoustic Monitoring of the Baltic Sea Harbour Porpoise), which involves static acoustic monitoring of the Baltic Sea Harbour Porpoise, wherein, scientists investigate the distribution of and habitat preferences of these mammals, Another example - and co-implemented with WWF Poland – is the project “Protection of habitats of birds and marine mammals”.

<https://www.sambah.org/>

Revitalisation of the Nowy Port district with the Wisłoujście Fortress - a project implemented by the city of Gdańsk

As part of this project, roads and underground infrastructure of selected streets will be rebuilt in the Nowy Port district. The works will include, among others replacement of streets and pavements, reconstruction of parking spaces, installation of monitoring and lighting. The so-called ‘waterside square’, which is the area adjacent to the closed ferry harbour, is to be transformed in such a way as to serve various forms of recreation for residents, as well as to serve as a market place.

Waterfront I and II project implemented by the city of Gdynia

The first stage of the project concerned the creation of a multifunctional Gdynia Waterfront complex, including an office building with cafes and restaurants on the ground floor, and a hotel - Courtyard by Marriott. The office space has been designed in accordance with the principles of sustainable construction.

The second stage includes the construction of residential buildings, office buildings, numerous service premises, a hotel, conference area and Spa, as well as public utility facilities, including a cinema. Important elements of this part of the project are publically accessible passages, a public square and the landscape architecture that emphasises the individual functional zones of buildings. The newly designed buildings harmonise with the modernist architecture of Gdynia. In creating public spaces and incorporating classic elements, the project creates so-called “Soft borders” – by using features like arcades or pergolas - to merge the old with the new.

<https://vastint.eu/pl/projects/gdynia-waterfront-i-2/?lang=pl>

<https://vastint.eu/pl/projects/gdynia-waterfront-ii-2/?lang=pl>

The Blue School Władysławowo

The school provides broadly understood ecological education based on the natural and cultural values of the Coastal Landscape Park (NPK). Through workshops and ecological classes, the aim is to deepen the students’ knowledge of science, especially the knowledge of environmental protection. This goal is implemented using the natural values of the NPK natural environment and exemplary problems and ecological threats. A particularly important aspect is the pollution and protection of the waters of the Baltic Sea and Puck Bay.

Projects implemented by the city of Rotterdam

These mainly concern the addition and remediation of architectural elements. Within their framework, one such project is that of the Markthal Rotterdam building, which is a market hall. It is a 40-meter-high building in the shape of a horseshoe with 228 apartments. In addition, in renovating or creating new sports fields in the city, apart from the sports aspect, they are additionally designed to retention reservoirs in the event of flooding. A far different project is the creation of a farm floating off the coast, where not only vegetables will be grown organically, but free-range cattle will also be raised. HyTransPort.RTM project implemented by the Port of Rotterdam

The Port of Rotterdam has been tasked with creating a new hydrogen pipeline to form the basis of a future hydrogen infrastructure. As a result, Rotterdam is to be the main European centre of hydrogen distribution (hub). Creating a hydrogen-based economy will make it possible to achieve in the future the climate goals of minimising greenhouse gas emission. In the investment, a

publicly owned pipeline will be built between the Maasvlakte and Pernis areas. Such form of ownership means any company looking to deal with hydrogen can connect to the pipeline. The implementation of the project will create the possibility of exchanging hydrogen between companies in the port of Rotterdam. In the future, it will also be possible to transport hydrogen to destinations in the rest of the country. With time, the pipeline is to be connected to the national hydrogen network operated by Gasunie. It will also be connected to Chemelotin Limburg, the German North Rhine-Westphalia region and other European regions.

The project “Economic and environmental rationalisation of the wastewater treatment system in the commune

Mielno - stage I - reconstruction and expansion of the sewage treatment plant in Unieście “implemented by the City of Mielno

In this project, the sewage treatment plant in Unieście was not only rebuilt but also extended. This allowed for a more efficient management of water resources and a reduction in discharges of insufficiently treated wastewater. The construction had a positive effect on the waters of the nearby Jamno Lake and the Baltic Sea.

Development of the Friendship Promenade in Mielno

The project involves the reconstruction of the promenade (combining two fragments destroyed in the 1980s), which will make it possible to enhance the tourist experience. The project is to result in an increase in the expected number of visits to the cultural heritage and natural sites made accessible. Moreover, an increase in employment in the supported entities is expected.

Construction of a fishing basin in the Port of Ustka, along with accompanying communication infrastructure

The project assured the safe use of the port (berthing conditions) and enhanced safe handling conditions for boat units and moored vessels at unloading sites. As part of the project implementation, it is planned to expand the fishing basin by building a new fishing basin, along with reconstructing unloading sites (quays) and rebuilding communication routes necessary for their connections with national road 21.

<https://www.ustka.pl/pl/artykul/202/168/budowa-basenu-rybackiego-w-porcie-ustka-wraz-z-infrastruktura-komunikacyjna>

BEST project (Better Efficiency of Industrial Sewage Treatment), implemented by the City of Helsinki and the John Nurminen Foundation (JNF)

The aim of the project was to improve the treatment of industrial wastewater in municipal wastewater treatment plants in the Baltic Sea region. Improving the quality was understood primarily as reducing the phosphorus and nitrogen load to a minimum in treated sewage, but also eliminating the particularly dangerous substances that, even in small amounts, cause enormous damage to the aquatic environment.

The project involved countries such as: Finland, Latvia, Estonia, Poland, Russia, and indirectly: Sweden, Germany and Lithuania. The city of Helsinki has assumed the role of the project leader.

BARP – Baltic Phytoremediation

The main goal of the project is to raise awareness of the available technologies that use plants in the process of environmental cleaning (phytoremediation). The method allows the soil to be cleaned from pollutants such as petroleum, heavy metals, nutrients and microplastics. The project will carry out 3 pilot projects in contaminated areas in Orrefors, Gdańsk and Klaipeda.

<https://www.lammc.lt/en/international-projects/baltic-phytoremediation-bapr/3283>

WISA– Water Innovation System Amplifier

The general idea of the project is to reduce the source of rainwater pollution, mainly coming from fertilisers and other pollutants scattered during unloading or loading of ships. Reducing pollution will contribute to reducing the eutrophication of the Baltic Sea. Activities will focus on the collection and evaluation of rainwater data, followed by the development of prototypes and business models for rainwater management.

<https://southbaltic.eu/-/wisa>



GOAL 15 LIFE ON LAND

Sustainable use of terrestrial ecosystems includes taking into account the proper functioning of the natural environment in human activity, i.e. in accordance with the laws of nature, and thus the management of space that will ensure the preservation of natural processes. In cities, this applies to processes that simultaneously provide many benefits for society (the so-called 'ecosystem services') and build natural capital, i.e. resources of the natural environment useful for man, which are not the result of his work. It covers procurement, social and regulatory services. Procurement services ensure the supply of basic goods such as food products or raw materials (wood, aggregate). Social services include recreational, social integration, education and contact with Nature. The last group are regulatory services, i.e. those that shape natural processes that affect living conditions. At the same time, the desired natural processes in the city are those that oppose the negative effects of urbanisation on natural conditions, i.e. in terms of:

- **climate conditions** – to favour the exchange and regeneration of air - this is the share of areas covered with vegetation and water, constituting thermally contrasting areas;
- **hydrological conditions** - to help to slow down the outflow of rainwater to watercourses – which reduces the risk of floods and flooding and affects the supply of groundwater, consequently, increasing or at least reducing the loss of water resources;
- **biological** – to help to maintain and restore biodiversity in terms of species and ecosystem (species and ecosystems should correspond to the diversity of the local habitat) and the maintenance of natural connections - ecological corridors ensuring ecological connectivity.

DEVELOPMENT DIRECTIONS

- Three groups of subjects related to protection, management, research and policy making
- Protection of ecosystems in the city
- Improving the quality of the environment in the city and protection of the components of the natural environment;

- Halting the loss of biodiversity and enhancing the functioning of urban ecosystems;
- Increasing Nature protection areas in cities, including providing forms of protection adequate to urban conditions;
- Increasing the effectiveness of protection of environmentally valuable areas in cities
- Incorporating city development, city management and the shaping of urban spaces into a policy of carbon neutrality;
- Protecting terrestrial ecosystems in cities as such areas serve as carbon dioxide absorbers and take on the role of offsetting greenhouse gas / carbon emissions and urban emissions;
- Preparing a comprehensive assessment of the biodiversity of forests and other valuable natural areas in the city;
- Preparing a comprehensive assessment of the economic value of ecosystem services provided by terrestrial ecosystems within the city limits;

Management of terrestrial ecosystems in the city

- Taking urgent and meaningful action to reduce degradation of natural habitats and soils caused by inadequate spatial policy;
- Increasing the area of areas covered by local spatial development plans in order to preserve valuable natural areas and stop their degradation, especially in the context of the chaotic spread of cities;
- Modernising and expanding sewage treatment plants and sewage systems, if possible, implementing a separate sewage system - separating the sanitary sewage system from the rainwater sewage system;
- Eliminating pollution emission sources or reducing their impact in the city and adjacent areas;

Policy towards terrestrial ecosystems in the city

- Conducting a planning policy that takes into account the city's natural functioning, including: the city's natural system or green infrastructure on the city scale, natural connections in the city between it and its surroundings (layout and functioning of ecological corridors), valuable species and habitats (flora and fauna refuges);

- Promoting integrated planning and development of urban areas and limiting the influence of cities on the city's natural system;
- Promoting the policy of protecting open spaces in cities, especially that outside the dense urban zone, in order to minimise their negative impact on terrestrial ecosystems;
- Promoting instruments (e.g. legal, financial, compensation) favouring the implementation of green infrastructure on a site-scale
- Adopting strategic and planning documents that are in line with the policy of shaping the city's spatial structure so as to increase the quality of the environment in terms of protection (strengthening and socialising elements of the city's natural system), rational management of natural resources (maintaining natural capital), monitoring of the Sustainable Development Goals in creating a low-emission and effective economy that offers protection to valuable landscapes;
- Promoting Nature education and increasing public awareness of the city's natural environment, protecting the urban environment and preserving the city's natural heritage;
- Ensuring effective management of the city's budget for the protection of terrestrial ecosystems, enabling the use of funds from all possible sources (including external subsidies) for the preservation and sustainable use of valuable natural areas and for increasing biodiversity.

PRIORITY TARGET GROUPS

Target groups cooperating for the sustainable management of terrestrial ecosystems are related to various activities and courses of action.

Groups diagnosing problems of the functioning of terrestrial ecosystems in cities and proposing methods of assessing their condition and protection:

- Employees of scientific and academic institutions
- Forestry, ecology and biodiversity experts
- Employees of public institutions
- Non-governmental organisations

Groups initiating activities / formulating policies regarding development directions:

- Administration staff, city officials
- Employees of public institutions
- Non-governmental organisations

Groups implementing solutions:

- Administration staff, city officials
- Employees of technical enterprises
- Foresters - persons responsible for forest management on a local scale
- Trade and industry associations
- Non-governmental organisations
- City activists

Groups to which the educational activities will be directed:

- Children and youth
- City activists
- Residents (total)
- City investors
- Representatives of the construction sector
- Developers
- Trade and industry associations

MAIN AREAS OF ACTIVITY

- ENACTING ENVIRONMENTAL EDUCATION
- PROTECTING URBAN ECOSYSTEMS
- MANAGING OF URBAN ECOSYSTEMS
- INCREASING BIODIVERSITY IN THE CITY
- FOLLOWING SUSTAINABLE URBAN FORESTRY PRACTICES
- GREENING THE CITY

Main areas of activity	Actions
<p>ENACTING ENVIRONMENTAL EDUCATION</p>	<ul style="list-style-type: none"> • Implementing lead initiatives and projects on a continuous basis of environmental education (e.g. in the form of field and workshop activities, competitions, festivals, Olympics, tournaments, etc.); • Offering workshops promoting green infrastructure • and other activities for the protection of ecosystems to groups implementing the city's spatial policy and conducting investment activities (developers, administration of housing cooperatives and communities, employees of technical enterprises); • Organising education in the field of city ecology, urban environment protection and biodiversity (e.g. trainings, courses, postgraduate studies, also for adults); • Establishing centres bringing together scientists and researchers dealing with Nature protection in cities that, in turn, will constitute the basis for making real, projects within the framework of sustainable development of urban ecosystems, and which are to be equipped with tools (laboratories, software) enabling research, and treatments consisting in restitution of populations of species subject to strict species protection; • Initiating projects that involve the local community in activities for biodiversity and ecosystems (e.g. winter feeding of birds and urban animals, cleaning forests of litter, but also enacting projects such as BioBlitz, public and offering consultations in activities for the implementation of local solutions of green and blue infrastructure); • Using educational activities for social inclusion (inclusion of socially excluded groups, seniors or other groups less involved in work to improve environmental conditions and create green infrastructure); • Promoting green and low carbon choices in everyday life;
<p>PROTECTING URBAN ECOSYSTEMS</p>	<ul style="list-style-type: none"> • Forming coalitions for shaping the natural environment in cities (including the preservation of natural habitats in the city) with research centres, thematic institutions (e.g. foresters), non-governmental organisations; • Establishing cooperation to help save native species, with municipal botanical and zoological gardens and forest districts;

	<ul style="list-style-type: none"> • Increasing the areas under legal Nature protection in cities in order to maintain the current use of the existing natural areas; • Enacting studies to bring to light the most valuable protected areas in cities, producing protection plans (national parks, nature reserves, landscape parks), generating plans for protection tasks (Natura 2000 sites), and for their buffer zones and other forms of Nature protection and other areas of natural value, creating local plans, so that planning decisions regarding these areas do not lead to deterioration of their natural values; • Including biotope value assessment (ecosystem services) and biodiversity in the urban development planning process (strategic documents, urban policy, spatial planning, etc.); • Using effective architectural and urban solutions while taking into account the economic management of land, water, energy and raw materials; • Creating structures friendly to native flora species and fauna (natural and semi-natural habitats, convenient nesting sites, natural food sources, modified street and building lighting system, including avoidance of “sky lighting”); • Restoring urban rivers and streams and water reservoirs so that they perform natural functions, i.e. restoring the natural or semi-natural systems and surroundings of watercourses and reservoirs - which will affect the hydrological functions and increasing biodiversity; • Eliminating invasive species in urban areas that threaten native flora and fauna; • Strengthening the management and control of the influx of exotic species and illegal releases that spread invasive and alien species in the city;
<p>MANAGING URBAN ECOSYSTEMS</p>	<ul style="list-style-type: none"> • Implementing mechanisms enabling the sustainable management of naturally valuable areas in the city (in particular, forests, rivers and wetlands and other vegetation and water) that provide ecosystem services;

	<ul style="list-style-type: none"> • Ensuring natural connections through a system of ecological corridors (belts of high vegetation in the form of water or mid-field trees or forest belts) connecting the city area with its surroundings and ensuring their protection against change of use (destruction mainly by building activity); • Recognising elements of the city's natural system (areas covered with vegetation and water) as integral components of the urban structure; • Monitoring of urban biodiversity, introducing innovative solutions, such as a calculator for assessing the biodiversity indicator assessing the impact of city policy or operational and conservation activities in specific areas of the city; • Conducting protection works (conservation activities) regarding endangered native species and urban ecosystems; • Enacting rational spatial management in the city - initiating a system of protection of open areas around the dense development zone, the so-called 'green rings', and following compact city concepts; • Researching and implementing the use of ecological building materials in order to prevent degradation of natural resources and environmental pollution; • Reclaiming degraded land and soil to improve the quality of the urban environment; • Remediating areas contaminated with hazardous substances, which are an obstacle to the development of the urban building structure and pose a threat to people and to terrestrial, inland and freshwater ecosystems (rehabilitation to restore the state before contamination);
<p>INCREASING BIO-DIVERSITY IN THE CITY</p>	<ul style="list-style-type: none"> • Maintaining and creating in the structure of the urbanised landscape, large areas (> 2ha) with natural functions, such as: forests, meadows with trees, parks, gardens, squares and water reservoirs; • Creating urban gardens of wild nature next to arranged green areas, which are easily accessible to residents, especially for children and young people;

	<ul style="list-style-type: none"> • Introducing native and, if it is impossible, resistant to urban conditions (pollution, salinity, water shortage) species of trees and shrubs in the city - in public and street areas and promoting native species in semi-private and private areas (areas of housing cooperatives and communities, private gardens); • Improving biodiversity by creating local, even small biotopes with the limitation of maintenance works (mowing, fertilization), e.g. in some of the arranged green areas, restoration of habitats important for disappearing species; • Including undeveloped areas such as former farmland and grasslands, as elements of green infrastructure on the city scale, as these fulfil important natural functions (biological, climatic, hydrological) that help to maintain biological diversity (especially for pollinators, amphibians, reptiles, small mammals and birds); • Maintaining and developing urban agriculture, especially in areas with good soils (classes I-III), including conservation and introducing new allotment and community gardens - important as a shelter for wild animals in the city, promoting organic farming to supply local residents and entrepreneurs (local restaurants, bars), developing urban beekeeping and maintaining traditional crops for the region (e.g. Lublin region, grapes in the Lubuskie or Sandomierz regions); • Introducing urban agriculture with social functions (educational farms, rehabilitation farms)
<p>FOLLOWING SUSTAINABLE URBAN FORESTRY PRACTICES</p>	<ul style="list-style-type: none"> • Maintaining the existing and creating new urban forest complexes, especially in areas with poorer soils (class IV-VI); • Promoting new forest plantings of mainly native species of trees and shrubs in accordance with the habitat - which promotes greater immunity;
<p>GREENING THE CITY</p>	<ul style="list-style-type: none"> • Increasing the number of trees and shrubs in the city (especially with developed crowns and rich foliage), if possible, using native species, and pursuing a policy of protecting growing specimens against logging (treatment of ancient trees);

	<ul style="list-style-type: none">• Creating elements of green infrastructure on a place scale including in dense development areas such as: pocket parks, green roofs, rain gardens, biofiltration ditches, vertical gardens, green tracks, flower meadows (introducing elements covered with vegetation or water) in order to slow down the runoff of rainwater and improve air exchange), emphasising the use of native species;• Creating green infrastructure systems combining individual components (larger as a whole, such as a system of green streets, a system of green areas (spatially related parks, squares, green spaces) in order to improve the natural environment conditions in the city and reduce the risks associated with climate change (better adaptation to climate change);• Increasing access to green areas by creating new green areas (parks, squares) and using the existing areas covered with vegetation or water (including wastelands) for recreational purposes;• Changing the green management policy in the city - increasing the emphasis on maintaining natural vegetation and semi-natural, reducing the traditional care of green areas as much as possible (limiting raking leaves, introducing free-growing spaces, planting trees and shrubs important as food for small animals)• Changing the policy of managing greenery with regard to lawns - limiting the mowing of lawns, or replacing them with flower meadows or with cover plants in order to increase the areas important for pollinators and small fauna;
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Examples of initiatives in cities

A good practice in enacting solutions favouring the greening of cities lies in employing financial instruments shaping the pro-ecological city policy, such as tax exemptions related to projects involving the creation of green areas, or areas covered with vegetation, such as green roofs or walls. Examples of such resolutions can be indicated for various cities in Poland, such as Wrocław, Katowice or Kalisz, although this is not yet a common practice. The condition for maintaining such an exemption is the submission

of an annual statement on the maintenance of a green roof, green facade or vertical garden on at least one wall of the building, as well as photographic documentation and submission. Sometimes, slightly different rules are applied for buildings up to 5-6 storeys and higher (here, for example, 50% of one of the walls will be covered with vegetation as a minimum). Some of these examples are referenced below:

- RESOLUTION NO. XV / 268/15 OF THE WROCŁAW CITY COUNCIL of 3 September 2015 on real estate tax exemptions for usable residential premises as part of the project to intensify the creation of green areas within the City of Wrocław
- RESOLUTION NO. XXXVII / 827/21 OF THE COUNCIL OF THE CITY OF KATOWICE of 22 July 2021 on exemptions from real estate tax for usable areas of residential premises located in residential buildings with a green roof or vertical garden or with green facades
- RESOLUTION No. XLV / 620/2021 OF THE CITY COUNCIL OF KALISZ of October 28, 2021 on the property tax exemption for residential buildings or their parts with a green roof or a vertical garden or with a green facade

BioBlitz - an example of an urban event that aims to collect information through a rapid Nature inventory – by listing all species observed in a selected area. Such action is integrated by scientists and the local community, i.e. researchers dealing with the natural environment, amateur naturalists, as well as various people living / staying in the city, who want to participate in such an action even as one-time volunteers. Activities like these are primarily aimed at engaging various social groups for the protection of biodiversity in cities. Often co-organisers, apart from city offices, are non-governmental organisations, as in the case of Warsaw, where, together with OTOP (Polish Society for the Protection of Birds), BioBLitz was organised for Dolinka Służewska, for which an information brochure was prepared on their basis (<https://otop.org.pl/wp-content/uploads/2020/03/Broszura-Dolinka.pdf>) and an after-study report (<https://otop.org.pl/wp-content/uploads/2020/03/Raport-Dolinka.pdf>)

Executing solutions favouring the preservation of biodiversity and the recovery of valuable ecosystems by creating green areas in a new - ecological formula - with a large share of native species, maintaining the existing tree

stand and restoration of watercourses, such solutions are used in Poland, but they are still only a few examples of this activity that have been realised. These include the renaturalisation of the Sokołówka river in Łódź, completed in 2014 (<https://uml.lodz.pl/aktualnosci/artykul/szlak-dolina-sokolowki-za-nami-dwa-etapy-konsultacji-spoleczne-projektu-id35082/> 2020/6/17 /), with a multifunctional layout of green areas of great importance for biodiversity that involved restoration of natural habitats, including wet ones, with increased water retention capacity, deconstruction of the bed and slowing down the outflow of rainwater). Of note, at the same time, this action created a resident-friendly space. A further example is the development of the Krzna valley in Biała Podlaska, where a newly developed recreational area with a path among trees, and an educational pavilion was created (<http://podlasie24.pl/miasto-biala-podlaska/region/spacer-wsrod-drzew-2f042.html>).

Singapore Biodiversity Index

In 2008, the Singapore Biological Diversity Index (CBI) was developed on the basis of a series of expert workshops. This indicator is a tool for the self-assessment of cities in terms of their efforts to protect biodiversity. It is based on the definition of the biodiversity profile of the city and the priorities of the city's policy in this regard, and is applied to monitor the activities undertaken by the city at specified intervals. In total, it includes 28 indicators in three groups of issues, such as: native biodiversity of the city, ecosystem services provided by biodiversity, management of biodiversity. In the first group, indicators such as the share of natural areas in the city, the share of protected areas or invasive species are assessed, in the second group - regulation of the amount of water, climate regulation, recreational services and food security are noted. The third group of indicators enables a scrutiny of the budget allocated to biodiversity, the state of the city's green and blue infrastructure management plans, the degree of participation and partnership: the existence of formal or informal public consultations on biodiversity issues, education, awareness and civic learning. Each of the indicators is assessed with a maximum of 4 points. The application of the Singapore Biodiversity Index (CBI) enables an overall assessment of the city's biodiversity policy, and its results constitute a convenient tool to support decisions related to environmental protection in the city and to coordinate actions taken in various fields. Warsaw is currently working on the Polish version of this indicator.

Good practices from Polish cities participating in the “Action Plan for Cities”

Busko-Zdrój

The Busko Zdrój commune is characterised by enormous natural wealth related to the geological basis and location on the border of three geological units: the western end of the Połaniec sinkhole, and a tectonic framework with a heterogeneous structure forming the Garb Pińczowski and the Solec basin. This is reflected in the diversity of natural habitats and the number of plant species associated with them, including rare and endemic ones. These habitats, due to the occupying of small areas closely related to the ground and topography, are exposed to degradation because of human activity and climate change. They are also not very resistant to transformations caused by even minor changes in the environment, e.g. lowering or increasing the groundwater table, and thus susceptible to being displaced by less demanding habitats. An example is the habitats located in the “Owczary” reserve. Its short description will reflect the issues discussed.

The “Owczary” reserve is situated among cultivated fields, in a slight depression, limited from the south-east and north-west by steep slopes of gypsum rocks. A vast basin with a small, freely flowing watercourse, fed by a salty sulphate-chloride spring, occupies the central part of the reserve. The specificity of this area is associated with the presence of salt marshes that supports the development of the halophilous vegetation characteristic for this type of habitat. In the wettest places, there are: spearhead, manny sticking out, sea rush and salt flycatcher. Drier places that are distant from the watercourse are covered with: bloated clover, serrated clover, long-haired sedge and trefoil. Despite the significant degradation of the reserve’s flora (as a result of poor drainage and obstruction of one of the two salt springs), it still has the richest halophilic flora in the Nida Basin and remains the only site of this type in this area. A very interesting beetle related to the salt pans is a notable representative of the fauna of the site. This is its only habitat in Poland.

So as to fulfil tasks in the scope of objective 15 - influencing the increase in biodiversity, Busko Zdrój, in 2020-2021, undertook a project entitled “Promotion of organic food production by planting honey trees as a way to protect and improve the quality of the environment and biodiversity in the Świętokrzyskie Voivodeship” which involved planting plants that attract pollinators. This task was completed by the city through planting: in 2020, in “Za Rafał” park, 10 small-leaved linden, 10 Tartar maple, 10 David’s budlei and 10

glossy cotoneaster; in 2021, on os. Sikorskiego along ul. Eastern, a further 30 small-leaved linden and 5 Tartar maple were planted, along with 60 glossy irga in the entrance area of the Skatepark.

Other tasks carried out by the city with regard to enhancing biodiversity include the establishment of a floating island for swans in the German Pond and nesting houses for ducks along the western shoreline of the pond located in the Skatepark. Moreover, in a selected area of the “Małpi Gaj” park, the city ordered less frequent mowing, which was announced with relevant information boards.

Busko Zdrój, being a spa town, it pays special attention to urban greenery and its partial naturalisation. The city’s activities are aimed at connecting these areas with each other through ecological corridors enabling the migration of animal species between habitats, thanks to which many species can survive despite unfavourable changes in the environment. A beneficial consequence of animal migration is the migration of plant seeds on their fur. The seeds of insect-pollinating plants often catch on the hair of animals because of their



Photo 30. An example of a house for insects built at the German pond in Busko Zdrój (in the Skatepark). Source: Town Hall in Busko-Zdrój

hook-shaped outgrowths. The fruiting bodies of fungi are also transferred in a similar way, as well as their threadlike hyphae that serve as food for animals. These corridors, from an ecological point of view, are an important and necessary component facilitating the exchange of matter between a part of the living world (biocenosis) and an inanimate biotope. Birds and insects eagerly migrate along such corridors. The former carry heavier seeds by eating them and expelling the seeds elsewhere, or by hiding them in hard-to-reach places as supplies for the winter season. Other animals (e.g. from the squirrel family) do the same.

In connection with the above, in 2017-2019, Busko Zdrój carried out the task entitled “Development of green

areas in the city of Busko-Zdrój”, mostly financed by the EU and the National Fund for Environmental Protection and Water Management in Warsaw. The project covered undeveloped areas located in the area of the City of Busko-Zdrój, i.e. “Małpi Gaj” park and “Za Rafał” park, as well as representative squares in various parts of the city.

The main goal of the project was to stop the decline in green areas in the area of the city of Busko-Zdrój by managing degraded and damaged areas through replanting. The implementation of the detailed objectives was in line with the 15th objective of the 2030 Agenda for Development, and they included the following: reducing the occurrence of plants belonging to invasive alien species, creating habitats convenient and attractive to insects, birds and small mammals based on multi-species plantings and multi-storey vegetation and the introduction of solutions favourable to the protection of species of flora and fauna. The intent of the project was to ensure resistance to current and future climate variability. The city also ensures strong cooperation between the Department of Municipal Economy, Property Maintenance and Housing of the City and the Commune Office in Busko-Zdrój, and with a class with a landscape architecture profile from the Technical and General Education School Complex of Casimir the Great in Busko-Zdrój. Thanks to the agreement of these units, students, as part of apprenticeships, among other projects, prepared the land for the sowing of a flower meadow at the German Pond in the area of the Skatepark.

Beyond the aforementioned, every year, on April 22, on Earth Day, the City and Commune Office organises the action “cleaning the commune”, in which village councils, educational institutions and non-governmental organisations take part. Moreover, in December, the action entitled “You segregate waste, you get a Christmas tree”, commences. Accordingly, residents of the commune receive conifers for the waste they bring.

Karpacz

In the Karpacz Commune, there are 8.6 ha of arranged green areas (green areas, housing estate green areas, cemeteries). There are also 5 parks, 7 squares, green dividers in its road lanes and greenery next to Karpacz’s public utility buildings. The leading species in plantings include mountain pine in varieties, rhododendrons and Japanese and Pontic azaleas, hydrangeas, roses, cotoneaster and daylilies.

In 2016, at the request of the Karpacz Commune, the “Program and spatial concept of selected areas of the Karpacz Commune for the implementation of the task entitled: Development of green areas in the Karpacz commune

by creating and renewing green areas in order to improve the quality of the environment” was prepared. The study concerned seven city squares and was aimed at enhancing the quality of the environment in terms of increasing the biologically active surface and expanding the city’s green areas, increasing biodiversity, enriching the layered structure of greenery, and preventing wind and water erosion. For the development of the areas, the use of pro-ecological solutions was adopted.



Photo 31. Two of Karpacz’s mini-parks.
Source: Town Hall in Karpacz

Karpacz from 2016 to 2020 had also continuously carried out activities to improve the quality of the natural environment of the commune and increase the share of green areas in the structure of its spatial development. The project included squares, parks and road lane dividers and was co-financed by the Infrastructure and Environment Program. This project is also the subject of this study.

In 2020, the Karpacz Commune began to prepare project documentation for the implementation of the task entitled “Green and Blue Karpacz - implementation of adaptation, mitigation, education and information measures in the area of the Karpacz Commune”. As part of the work, design documentation was prepared for the greenery of new parks and for parks selected for revitalisation, the design of accompanying greenery in road lanes and the project “green stops” with the use of eco-pots.

As part of the priority task no. 2 of the “Karpacz Village Renewal Plan for 2008-2015”, i.e. Improving the level of accessibility to places of rest and recreation, a new park was constructed in the field of urban greenery at ul. Nadrzeczna, and the Park at Lipa Sądowa and the Park at DW Mieszko were restored. The works consisted of new plantings of greenery, creating and rebuilding foot paths and installing street furniture and park lighting, as well as placing flower pots planted with perennials and grasses, and flower towers with annual plantings in places with impermeable surfaces.

Mielec

The local government, in accordance with the provisions of three documents: “the Environmental Protection Program for the city of Mielec for the years 2022-2025 including the perspective for 2026-2029”, “the Development Strategy for the City of Mielec for the years 2021-2026 with a forecast until 2030” and “the Local Revitalisation Program for the City of Mielec for the years 2016-2023”, has undertaken activities in the field of developing its undeveloped areas and city spaces so that the total area of green areas is increased. Improving the accessibility to green areas favours solving the problem of Mielec being perceived by young people as an unattractive city.

One of such activities is sowing flower meadows. This activity will improve the quality of the city not only in terms of aesthetics, but also in its approach to Nature. Establishing a meadow as a plant community in the urban tissue is very important for the protection of the area’s fauna nature. Moreover, meadows create a better microclimate in the city and prevent the soil surface from heating up. They thus increase the biodiversity in the city by performing

several functions: ecological, practical, aesthetic, protective and also social - they attract residents, and can contribute to the activation of various social groups, including the elderly.

The potential of Mielec in terms of green areas is created mainly by eight parks of a walking, recreational and recreational nature with a total area of 51.31 ha. In 2017-2018, the share of parks, lawns and estate green areas in the city area decreased from 2.8% to 2.6%, which was lower than the average for the comparative group (3.05%). The situation has now improved. In 2018-2021, the park area has increased by 12.11 ha.

One of the major activities undertaken in 2018-2020 in terms of enhancing the quality of urban greenery was the implementation of the project entitled: "Improving the quality of the urban environment through the development of green areas in the Mielec City Commune 2014-2020 as part of the POIŚ Project 02.05.00-00-0062 / 16, co-financed by the National Fund for Environmental Protection". As a result of this project, a new recreational area was created on an area of over 15ha - a sensory park on the former landfill with adjacent forests, along with a natural playground and an enclave of new plantings of shrub trees, A recreation area was also created that is adjacent to the current sports field.

In the context of the development of green and blue infrastructure, the availability of attractive recreational areas for various social groups - the elderly, young people, families with children - is extremely important. In Mielec, people who want to actively spend time outdoors are encouraged by the presence of 12 outdoor gyms, the publicly accessible Gryf Mielec stadium, two skate parks and over 68 kilometres of bicycle paths. It is worth quoting here the results of tests taken during a diagnostic workshop attended by adolescents. Accordingly, almost the same number of people assess the attractiveness of recreational areas as negative as positively. However, as indicated by the participants of the diagnostic workshop, Mielec is "nice, clean and green, and there are many attractive places to rest (such as its boulevards or Górka Cyranowska park)".

Mielec demonstrates that it is good practice to set up flower meadows and grassy areas on reclaimed landfills. In Mielec, establishing a flower meadow on such a site turned out to be an effective way of managing this part of the park, which was subject to special regulations on landfill reclamation, soil protection, as well as agricultural and forest land. The degraded area has now gained a new quality in terms of natural, climatic, social and spatial aspects. The area has also been adapted for recreation and attracts people due to the abundance of herbaceous plants found there, that bloom abundantly in

spring, summer and late summer. The flowers, in turn, attract a large variety of pollinating insects (insect hotels are set up nearby). Furthermore, the slopes of the landfill have been grassed. The meadow established below the canopy in a flat area has a different character. Despite the common design assumptions, the meadow differs slightly in the composition of the mixture. Still, its herbaceous and colourfully blooming plants perfectly match the sensory nature of the park.

Ostrów Mazowiecka

The city conducts educational activities among the inhabitants of Ostrów Mazowiecka in the field of shaping pro-ecological attitudes and building an ecological image of Ostrów Mazowiecka. The city's permanent task is to improve the quality of its trees and shrubs and to increase the amount of its green areas. For example, in 2020, a new recreational space was created at ul. Winnie the Pooh. Over 300 new trees were also planted: oak, rowan and ginkgo, maple, black locust and linden, and 5,900 shrubs of the species: physalis, barberry, cotoneaster, tawula, cinquefoil, dogwood, scarlet fire and catnip. These are mainly plants planted near the newly created bicycle paths in the city.



Photo 32. The area of the sensory park, the former dump. Source: Extract from geoportal Mielecki Powiat

There are also pollinating insect-friendly areas in the city. Such an example is the project called “ A poplar corner “, where an insect-friendly area was created by the local community by planting honey plants. There is also a playground on the premises.



GOAL 16 PEACE, JUSTICE AND STRONG INSTITUTIONS

DEVELOPMENT DIRECTIONS

- Ensuring transparent, inclusive and equitable public institutions at the municipal level;
- Creating (in the social, cultural and economic dimension) a city that ensures respect for human rights for its residents, understood as directing the operation of the entire system of municipal public services and municipal administration to the human perspective [model: European Charter of Urban Rights];
- Ensuring equal participation of women and men in the life of the local community [model: European Charter of Equality between Women and Men in Local Life];
- Building a system of decent work adjusted to the qualifications and fair pay;
- Respecting the freedom of speech and the rights of refugees, national and religious minorities and sexual minorities;
- Counteracting crimes against children;
- Providing security - combating all forms of violence and violent crime;
- Increasing the effectiveness of local government activities aimed at social and economic inclusion;
- Developing a tolerant democratic society in which a variety of opinions are accepted;
- Improving the residents' access to information about their rights and obligations and providing universal legal assistance;
- Building an urban civil society - enabling and facilitating activities of social organisations (including by creating suitable conditions and providing resources needed for work);
- Improving the quality of local and local law;
- Creating simpler and stable legal and administrative regulations;

- Increasing the transparency of the functioning of public institutions operating in the city;
- Eliminating all forms of corruption and bribery;
- Building an effective and transparent system of management of development processes, ensuring coordination of the most important social and economic processes;
- Strengthening the strategic management system of development processes;
- Providing effective management (effective acquisition and rational spending) of public funds by the commune (including the use of EU funds);
- Ensuring rational and equitable use of local resources for the benefit of the entire community;
- Intensifying the use of information and communication technologies in management and communication with residents and entrepreneurs;
- Undertaking activities for the active and meaningful participation of all social groups in making key decisions about the city and increasing the awareness of residents about being part of the local community;
- Conducting participatory activities aimed at increasing the participation of citizens in the process of city management and its development;
- Increasing the influence of the civil society on the decision-making processes taking place in the city and for the use of the city budget;
- Conducting educational activities in the field of social participation and popularising the participatory concept of education (educational processes are particularly effective when they translate directly into participation and actual participation in public life);

PRIORITY TARGET GROUPS

- Administration staff
- Employees of public institutions
- Employees of local public service providers
- Police services and law enforcement agencies
- Tax payers
- Entrepreneurs
- Social organisations
- City activists
- Local and district self-governments

- Children and youth
- Immigrants
- Minority environments
- Excluded people
- Inmates
- Inhabitants (total)

MAIN AREAS OF ACTIVITY

- ENSURING HIGH STANDARDS OF LOCAL LAW
- PROVIDING EFFICIENT, FRIENDLY, COMPETENT AND OPEN LOCAL ADMINISTRATION
- USING HUMAN RIGHTS AS THE BASIS OF LOCAL ACTION
- PROVIDING EFFECTIVE MANAGEMENT OF PUBLIC FUNDS
- ENSURING EQUAL ACCESS TO LOCAL PUBLIC SERVICES
- PROVIDING SECURITY: COUNTERING CRIME AND VIOLENCE
- ENSURING ACCESS TO INFORMATION AND ENABLING SOCIAL PARTICIPATION

Main areas of activity	Actions
ENSURING HIGH STANDARDS OF LOCAL LAW	<ul style="list-style-type: none"> • Introducing a local law quality monitoring system (enabling supervision interference, complaints, appeals against administrative decisions); • Conducting quality monitoring, including the validity of local legal acts, required by laws and regulations; • Establishing legal advice points; • Creating transparent, easy-to-apply local law;
PROVIDING EFFICIENT, FRIENDLY, COMPETENT AND OPEN LOCAL ADMINISTRATION	<ul style="list-style-type: none"> • Establishing advisory and administrative support points; • Improving communication channels and increasing the frequency of messages addressed to residents by the administration and local institutions; • Enabling the use of online administration services, including the electronic platform e-office and EPUAP due to: <ul style="list-style-type: none"> - introducing electronic document circulation, - launching Internet platforms supporting the implementation of public contracts and dealing with the most common issues of residents;

	<ul style="list-style-type: none"> • Disseminating knowledge on how to handle administrative matters and the scope of activities of individual offices and local public institutions; • Popularising the image of open to inhabitant, friendly and accessible to all, professional public institutions; • Simplifying procedures and regulations for local government officials; • Counteracting bureaucracy and corruption;
<p>USING HUMAN RIGHTS AS THE BASIS OF LOCAL ACTION</p>	<ul style="list-style-type: none"> • Employing educational and popularising activities to improve awareness of civil and human rights; • Cooperating with the local community, non-governmental organisations (and other entities) to protect and improve respect for human rights (organising thematic programs and initiatives); • Using the function of plenipotentiaries for equality and disabled people - as above; • Promoting ethical attitudes in various spheres of life;
<p>PROVIDING EFFECTIVE MANAGEMENT OF PUBLIC FUNDS</p>	<ul style="list-style-type: none"> • Restoring the significance and using the obligation to inform residents about the assumptions of the city budget for the next year; • Enabling transparent control of the commune's debt ratio; • Implementing projects with the use of government funds, subsidies, a wide range of programs, etc; • Implementing projects with the use of EU funds; • Establishing information and advisory points serving residents in obtaining subsidies; • Involving the inhabitants in the management of public funds, e.g. by developing the initiative of the civic budget;
<p>ENABLING EQUAL ACCESS TO LOCAL PUBLIC SERVICES</p>	<ul style="list-style-type: none"> • Using the position of the municipal consumer ombudsman to monitor and disseminate residents' claims to respect their rights as recipients of local public services;

<p>PROVIDING SECURITY: COUNTERING CRIME AND VIOLENCE</p>	<ul style="list-style-type: none"> • Undertaking activities to strengthen the local security policy (cooperation with law enforcement services and authorities); • Acting to improve the sense of security (the role of local government of housing estates and districts); • Building an effective system ensuring safety in the city (e.g. monitoring); • Providing safe, friendly public spaces (enacting revitalisation processes, providing street and pavement lighting, supervising law enforcement and police services); • Assisting young offenders to re-enter society and putting into place actions to reduce the re-commission of a crime by facilitating the inclusion of inmates into the local community after serving their sentences; • Ensuring public and non-governmental organisations act in the field of assistance to domestic victims and stalking, as well as in counteracting hatred and discrimination; • Popularising the promotion of an honest model of life; Involving young people in social activities and activities (especially those from problematic and poor environments); • Promoting anti-crime projects (e.g. youth, parents and family support groups) - aimed at protecting young people from entering and becoming involved in serious crime and aimed at combating violence among young people, e.g. by eliminating „gangs“;
<p>ENSURING ACCESS TO INFORMATION AND ENABLING SOCIAL PARTICIPATION</p>	<ul style="list-style-type: none"> • Advancing initiatives promoting the inclusion of local communities in the city management processes (e.g. the annual citizens' panel on the report about the state of the city; regular meetings with residents, sessions, panels); • Promoting the model of shared responsibility for the development of the city; • Involving city stakeholders in city management processes by creating spaces for cooperation (councils, city forums, regular meetings, etc.); • Involving young people in decision-making processes and in work for the creation and implementation of local policy (active youth council activities, forums, discussion panels, etc.);

	<ul style="list-style-type: none">• Involving older people in decision-making processes and in work for local politics (active activities of the senior council, forums, discussion panels, etc.);• Involving the private and non-profit sectors in decision-making processes and in work for local policy (active youth council activities, forums, discussion panels, etc.);• Involving local media and internet communication platforms in order to inform residence about the activities of the city authorities and about current events;• Popularising the development of social participation and participation education (workshops, classes in schools, information campaigns, etc.);• Informing residents about the possibilities of participation in establishing and implementing urban policy, (developing a guide for participation in the life of the city);• Creating a city participatory portal with the possibility of co-deciding on planned undertakings of the city authorities (e.g. by means of: questionnaires, forums, interactive maps, polls);• Ensuring effective and efficient conduct of related activities within a participatory (civic) budget;• Organising civic assemblies for residents;• Using various communication channels to spread information about the activities of municipal authorities and public institutions;
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Good practices from Polish cities participating in the “Action Plan for Cities”

Kalisz

In order to increase the participation of citizens in the decision-making process concerning their immediate surroundings, the city cooperates with non-governmental organisations and other entities conducting public benefit activities, and for several years, information about the civic budget has freely promoted.

In Kalisz, a Youth City Council exists, the aim of which is to disseminate the idea of self-government among young people, as well as to increase the activity of young people and represent the interests of young people in the local government forum. In addition, the Kalisz Council of Seniors offers the over 60 residents of Kalisz the possibility of active participation in social life through cooperation with the authorities. The aim of this endeavour is to integrate, support and represent the elderly community. Since 2021, the Kalisz Women's Council has also been operating here, acting as an expert, consultative, advisory and initiative to the mayor of the city in the field of women affairs and the city's socio-economic life, including family policy, availability of health care and professional activation. Activities are also carried out by the Municipal Social Council for Persons with Disabilities, which is a consultative and advisory body. Its tasks include: enacting projects aimed at professional and social integration of people with disabilities, exercising the rights of people with disabilities, giving opinions on draft action programs for the disabled, evaluating the implementation of programs, giving opinions on other resolutions and programs adopted by the council in terms of their effects on people who are disabled.

Since 2017, there has been a Revitalisation Committee in Kalisz, which is a forum for cooperation and dialogue between stakeholders and city authorities in matters related to the preparation, conduct and evaluation of revitalisation, and acts as an opinion-making and advisory body for the city mayor. The Committee has the ability to evaluate documents related to revitalisation, as well as the right to take initiatives in this regard. The Committee represents all statutory stakeholders of revitalisation, including representatives of: residents of the revitalisation area, owners, perpetual users of real estate and entities managing real estate located in this area, other residents of the commune, entrepreneurs, non-governmental organisations, local government authorities and units, as well as public authorities and other entities, exercising the powers of the State Treasury or government administration in the area of revitalisation.

The city of Kalisz also undertakes activities related to less formal participation and social activation. An example of such an initiative is the Neighbourhood House with its seat at Podgórze 2-4 street. The house was built in 2019 as part of a revitalisation project. It is a place that integrates the community - the local, neighbourhood community, but also the residents of the entire city. It is also a place where individuals can obtain support, and one that stimulates activity, inspires and strengthens relationships between people. Here, neighbours and city activists can meet and become involved in local projects, individuals can implement their own ideas, take part in workshops, or attend open meetings or cultural events.



Photo 33. Neighbourhood House. Source: Neighbourhood House

In addition to the Neighbourhood House, as part of its revitalisation activities, the city also established other institutions: the Centre of Non-Governmental Organisations at ul. Babina 1 and the Culture Accelerator at Nowy Świat 2a street.

The task of the first of these institutions is to work for non-governmental organisations and other informal groups, as well as to integrate the community operating in the third sector in Kalisz. The Centre promotes the idea of volunteering and social activity, and serves to establish closer cooperation between non-governmental organisations and local government administration and the economic sector. It makes available the rooms at its disposal free of charge, i.e. the lecture hall, workshop rooms and other space along with the office and multimedia equipment located in them. It provides organisations with access to lockers and the ability to use the Centre's address as a correspondence or registered office address. It also provides substantive support to local organisations through consulting and training.

The Culture Accelerator is a municipal institution whose goal is to popularise culture and enable the activities of entities that co-create and popularise it. The accelerator provides a workshop, exhibition and multimedia space, facilitating the presentation of the artistic output of local artists and enabling local recipients to see the works of other contemporary artists.

The accelerator has a theatre and multimedia room, a ceramic workshop and a darkroom, as well as a workshop and exhibition space, it is an institution open to activities and initiatives of external groups - social and grassroots - although it also organises workshops or events on its own.

Skawina

The Skawina Commune has extensive experience in the implementation of activities in line with the 11 and 16 sustainable development goals. It is in a constant dialogue with its inhabitants, and smaller investments are also consulted with them (e.g. reconstructing streets into woonerfs, reconstructing the former DK44). The commune is also active in the field of sustainable mobility, implementing both infrastructure projects as part of Integrated Territorial Investments and taking an active part in soft projects such as Bicycle May, European Sustainable Transport Week and Partner Cities Initiative.

All these activities are aimed at improving the quality of life in the commune and strengthening the sense of shared responsibility for the local community and the shape of the surrounding environment. One of the challenges that will be tackled first as part of the operationalisation of strategic documents will be the development of neighbourhood units. Based on the experience from the implementation of the activities carried out so far, the commune wants to go a step further and identify the current challenges and aspirations of the residents in the participatory process, and then turn them into implementation projects. One of the key goals is to make the process common and the residents to take responsibility for the shape and future of their immediate surroundings.

Among the problems mentioned in the Report for the Skawina Commune from the beginning of 2020, the paramount was ineffective system of communication with residents with the growing demand for information. Still, the level of civic and social activity is constantly growing, but is, however, lower than the poviát and voivodship average. The number of non-governmental organisations and petitions addressed to the mayor is also growing all the time.

Most of the people who took part in the survey organised in 2019 as part of the work on the development strategy negatively assessed cooperation with the commune (information, communication and the possibility of influencing the commune's decisions), which shows that there is still a lot to be done in this area. Despite some critical voices regarding consultations organised in the commune, many people appreciate the efforts of the authorities and point out that the situation in Skawina is much better than in the neighbouring local governments. Those polled also noticed the need for two parties to participate

in the dialogue and the need to organise these relations and define the scope of possible decisions.

Although the social activity of residents in some matters (e.g. the fight for clean air) is quite high, it is generally rather low in terms of dialogue with the authorities and in the area of social integration. Its development is a big challenge, which is why educational and supporting activities, as well as strengthening, in particular, the local political activity of children, adolescents and seniors, are postulated.

The commune is developing tools for dialogue with residents. These include the Social Participation Portal, where residents can find information on public consultations, as well as submit an application or petition. City residents are involved in many processes taking place in the commune. These interactions have taken place, for example, in the case of work on the commune's strategy, when a series of public consultations was organised to learn about the residents' expectations regarding the commune's development and to look for solutions that would allow it to develop its potential and reconcile the various needs of the local community. In the process of preparing the current strategy, it was the inhabitants, entrepreneurs, non-governmental organisations and all others interested in the development of the commune who played a key role.

Since 2010, the Skawina Commune has been conducting a wide participatory process in the course of implementing various types of projects. These activities take place at various levels of participation, however, they are not limited only to informing the stakeholders. In 2010, for the first time, a series of workshop meetings were held in the villages to develop the "Village Renewal Plans". For the first time, village leaders were also involved as representatives of local communities in organising meetings with local stakeholders. A similar method was used to create the "Mobility Plan for the Skawina Commune". Instead of being consulted after the draft of the document was finished, residents and other stakeholders were involved in the creation of the document at an earlier stage. The same was done in the process of preparing the Commune Revitalisation Program for the Skawina Commune, which, also due to its nature, was largely socialised. The Skawina Commune went a step further by implementing the project of the Commune Development Strategy for 2021-2030. During the work on the document, 9 diagnostic meetings, 6 industry meetings and two strategic workshops were conducted. Additionally, a questionnaire survey was carried out in which about 1,500 inhabitants took part. In this case, the participation process was supplemented with obligatory social consultations on the finished draft document.

Involving residents in the decision-making and design process is now standard practice in Skawina and applies not only to strategic and planning activities, but also to investment tasks. In a multi-stage participatory process, a functional program of the educational centre in Big Roads and design assumptions for the reconstruction of the former national road No. 44 into a city street were developed together with the residents.



GOAL 17. PARTNERSHIPS FOR THE GOALS

DEVELOPMENT DIRECTIONS

- Promoting the cooperation of cities for sustainable development implemented in various activities and on many levels (referring to all SDGs) and involving various partners (local communities, including: the elderly, women, children and youth, the unemployed, entrepreneurs, students, disadvantaged people, as well as: the private sector, the non- profit, social organisations, charities, foundations, etc.);
- Developing, implementing, promoting and supporting programs / initiatives / projects related to sustainable development;
- Involving partners in the stages of planning, programming, implementation, monitoring and evaluation of programs, projects, initiatives and strategies for sustainable development;
- Building partnerships, including as part of: social consultations, meetings of groups appointed for cooperation, consultation workshops, issuing opinions on draft documents, conferences, exchange of information and experiences via IT systems, or through environmental impact assessment or assessment of the effectiveness and usefulness of the support provided;
- Ensuring cross-sectoral cooperation for the 2030 Agenda via ongoing initiatives in broad partnership and dialogue between all levels of administration and companies and institutions as well as other stakeholders;
- Promoting active involvement of various environments and mutual information on the undertaken actions and initiatives, conducting consultations and dialogue, as well as expressing expectations and arguments;
- Ensuring involvement and cooperation between public and private entities, NGOs, the science sector and civil society at various stages of planning and implementing activities for sustainable development. Promoting partnerships between cities and civil societies and businesses;
- Cooperating to counteract the development of the COVID-19 pandemic and to minimise its negative effects, balancing short-term goals with long-term goals, coordinating activities within partnerships and sectoral policies for specific goals, as well as between different levels of management, integrating economic activities and social ones that influence each other;
- Cooperating and sharing of knowledge and policy in science, technology and innovation with foreign partners;

- Strengthening global leadership for sustainable development in the implementation of selected SDGs;
- Recognising the need to strengthen existing cooperation mechanisms and platforms, partnerships and other implementation tools to accelerate the coordinated implementation of the Agenda with the active involvement of all relevant actors and with the overall aim of achieving sustainable urban development;
- Fulfilling the continuing need for an appropriate and predictable financial contribution to the implementation of the SDGs;
- Including business as a strategic partner for sustainable development;
- Improving outcomes in integration, self-learning and building stronger education systems;
- Engaging top political, business (and other) community leaders so as to shape local industry environments;
- Mobilising investors, companies and public interest groups to accelerate the adoption of sustainable business practices and solutions for a healthy global economy;
- Promoting exposure to good practice and learning partnership between cities and countries;
- Strengthening international cooperation in access to science, technology and innovation;
- Exchanging knowledge on mutually agreed terms and by improving existing mechanisms;
- Raising awareness of the global responsibility for sustainable urban development;
- Making efforts to ensure that municipal financial investments contribute directly to the achievement of the SDGs - implementing sustainable investments;
- Increasing the financial resources used for cooperation with partner cities and in partner cities;
- Cultivating and shaping relationships with cities and partners around the world;
- Adopting a decentralized approach to international cooperation focusing on international agreements on sustainable urban development policy with regard to social, economic and environmental issues.

PRIORITY TARGET GROUPS

- Public sector (city experts, officials, technical service managing the city)
- Non-profit sector (community organisations, charities, foundations, etc.)
- Science sector (academic institutions, business incubators, science and technology parks, research institutes)
- Local communities (young people, the elderly, women, children and adolescents, the unemployed, entrepreneurs, students, disadvantaged people, etc.)
- Private sector

MAIN AREAS OF ACTIVITY

- COOPERATING WITHIN THE COMMUNE
- ADVANCING INTERCOMMUNAL COOPERATION
- ADVANCING INTERNATIONAL COOPERATION
- SHARING KNOWLEDGE
- PROMOTING GOOD PRACTICES AND EXPERIENCES IN THE FIELD OF SUSTAINABLE DEVELOPMENT

Main areas of activity	Actions
COOPERATING WITHIN THE COMMUNE	<ul style="list-style-type: none"> • Acting to improve public awareness of shared responsibility for sustainable development; • Ensuring sustainable practices in public procurement and financial investments of cities; • Developing partnerships for justice and a balanced lifestyle; • Promoting intra-municipal cooperation for a unified approach and promotion to environmental, economic and social sustainable development; • Initiating the creation of city knowledge exchange forums and experiences dedicated to: entrepreneurs, officials, city activists and others;

	<ul style="list-style-type: none"> • Enacting integrated development, understood as cooperation between various areas of city policies and departments of city offices. Counteracting or avoiding the silo approach to development (horizontal integration).
<p>ADVANCING INTERCOMMUNAL COOPERATION</p>	<ul style="list-style-type: none"> • Participating in regional and national knowledge gathering and dissemination forums and associations; • Participating in pro-development programs (governmental and other); • Building intercultural understanding and dialogue, organising inter-municipal meetings and targeted projects; • Becoming actively involved in dialogue with other cities, joining the public debate on the sustainable transformation of cities; • Developing cooperation with a wide range of actors at the local level; • Undertaking partnership initiatives for sustainable development; • Practising integrated development, understood as cooperation between municipalities and neighbouring municipalities, especially within Functional Urban Areas (territorial integration);
<p>ADVANCING INTERNATIONAL COOPERATION</p>	<ul style="list-style-type: none"> • Developing international cooperation with the commune's own activities, including the implementation of projects co-financed from external funds; • Participating in pro-development programs and initiatives of a global nature, financed from external funds; • Undertaking projects / initiatives for sustainable development in close cooperation with: universities, international agencies (e.g. UNICEF, WHO, UNFPA, EU, SwissPeace, NATO, USAID, etc.), NGOs, decision makers and other stakeholders to support proven sustainable change in the city; • Including international issues in the scope of activities of municipal offices (e.g. establishment of offices dedicated to the coordination of such cooperation);

<p>SHARING KNOWLEDGE</p>	<ul style="list-style-type: none"> • Sharing specialist knowledge adapted to the context of activities and the target group; • Learning from global structures such as New Urban Agenda, SDGs, Paris Agreement, European Urban Agenda, Leipzig Charter and others; • Involving the private sector, the science sector as well as modern technologies and innovations in actions for sustainable development; • Promoting the exchange of information and experiences for sustainable urban management (e.g. urban policy reforms, the use of modern technologies, performance monitoring, the use of more environmentally friendly and innovative delivery options and communication); • Using technologies supporting the sharing of knowledge, in particular ICT technologies; • Strengthening the strategic framework and coordination for sustainable development by organising training for administrative staff;
<p>PROMOTING GOOD PRACTICES AND EXPERIENCES IN THE FIELD OF SUSTAINABLE DEVELOPMENT</p>	<ul style="list-style-type: none"> • Developing promotion tools and instruments and good city management practices; • Improving the efficiency and predictability of public spending; • Monitoring of actual expenditure allocated to the implementation of specific objectives in relation to the time spent in order to improve the efficiency of public expenditure management; • Promoting Financial investments of cities conducive to transformation towards sustainable development; • Developing standards and principles for fair trade that are environmentally and socially friendly, in line with sustainability criteria focused on the protection of natural resources and the environment; • Phasing out the use of fossil fuels; • Coordinating local development policy aimed at the implementation of SDGs;

	<ul style="list-style-type: none">• Using a wide range of event formats to popularise good practice in sustainable development to reach a wide audience and different target groups (lectures, focus groups, workshops, city tours, bike tours, games in the city space, food shows, city events, movie evenings and others);• Including and adapting Sustainable Development Goals in future urban development strategies;• Initiating projects dedicated to promoting the growth of civic involvement, especially of young people, who can support local efforts for sustainable urban development (organisation of youth clubs, establishment of the Youth City Council, conducting workshops, etc.);• Practising integrated development, understood as cooperation between various levels of management and local partners (vertical integration);• Promoting integrated development understood as maintaining a balance between investment activities and social (soft) activities.
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EXAMPLES OF SUSTAINABLE DEVELOPMENT INITIATIVES IN CITIES

The following examples of activities carried out in European cities show the important role played by various forms of cooperation in the framework of projects and after their completion. The collaboration presented in each of the projects presented below was possible through the establishment of development partnerships and comes from projects implemented under the URBACT and UIA programs - for integrated urban development.

In fact, most contain elements of cooperation within the commune, inter-municipal and international cooperation, exchange of knowledge and popularisation of good practices in the field of sustainable development.

COOPERATION WITHIN THE COMMUNE

Project Com.Unity.Lab

The Lisbon Local Development Strategy (TA) for Priority Areas of Intervention (BIP / ZIP) has provided the city with a range of integrated

governance toolsets based on co-governance. It organises and combines a bottom-up participatory perspective that provides a horizontal and collaborative local approach to reducing and mitigating social, economic, environmental exclusion and urban and increasing social territorial cohesion. The tools used are very different and rely on, among others, via neighbourhood mapping, a local partnership program to finance local projects, and a bottom-up co-governance model to promote employment, education and territorial cohesion. The results were visible at the commune and community level. In the years 2011-2020, approximately 1,100 applications were submitted, 392 projects selected by an independent panel were selected and over 600 partners were involved. The toolkit helped Lisbon set its own path, roadmap and goals, as well as to apply civic participation and co-management as a basis for local urban development. This good practice shows the possibilities of co-creation of policies and strategies regarding social and territorial cohesion and sustainable living in cities through a participatory framework involving the community, as well as through sharing stakeholders decisions, commitment and responsibility in implementing the BIP / ZIP Local Development Strategy.

The first tool, BIP / ZIP Mapping, identifies the City's Priority Territories for Intervention, as agreed with overlapping indicators of social, economic, urban and environmental deprivation that express the rupture of the city.

The second tool, the BIP / ZIP program, funds and launches community projects designed to respond to local needs, promote partnership with local organisations, and enable people to develop sustainable urban areas.

The third tool, the local GABIP offices, is applied to enable the development of a co-governance framework involving municipalities, local communities and all stakeholders and civic organisations. This advances a formulated response in the political, administrative and technical dimensions with local organisations and the community.

The fourth tool, the Collaborative Platform for Community-Led Local Development (CLLD), is a bottom-up co-management network that develops a global strategy for BIP / ZIP areas and promotes the sharing of experiences to improve the skills of local partners.

These integrated tools influence citizens' participation in genuine local development by offering a holistic approach that encompasses the social, economic, urban and environmental dimensions.

INTERCOMMUNAL COOPERATION

Project Tropa Verde

Tropa Verde is a multimedia platform created in the city of Santiago de Compostela (ES) to encourage environmentally friendly behaviour. By using the gaming-based online platform, citizens can win recycling coupons and redeem them for prizes from the City Council and local retailers. The project started after a 2015 poll that showed that many residents are reluctant to recycle because of their habits and lack of information. In less than two years, recycling has skyrocketed: more than 115 local sponsors have provided 800 awards - ranging from hotel accommodation to beauty treatments. Citizens received these gifts or discounts in return for 16,000 “recycling actions” in social centres, civic centres and green points. There were also workshops and street actions and other promotional activities. In addition, school campaigns collected thousands of litres of used cooking oil and 3,299 used electrical appliances. Today, Tropa Verde operates in at least six cities.

The Polish version of the portal is intended for the inhabitants of 21 municipalities making up the Opole Agglomeration Association. Its full version was launched in the second half of 2020.

The principles of the portal’s operation are very simple: every time a portal user delivers waste (in the places indicated in the “earn stars” section), he or she receives a voucher with stars (points). The portal user can collect these stars on his/her account (free registration on the website) in order to exchange them for discounts and gifts that appear in the “Awards” section. The prizes are awarded by local sponsors who cooperate with the portal. At the moment, the Tropaverde website is intended only for the inhabitants of the Opole Agglomeration.

INTERNATIONAL COOPERATION

Project Welcoming International Talent

Debrecen is the economic, cultural and scientific centre of eastern Hungary - and the second largest city in the country. Due to its flourishing economy, the city allocates significant resources to the promotion of international investments and the development of local companies. Debrecen recently announced over € 2 billion in foreign direct investment and 8,000

new jobs. Housing several multinationals such as BMW, Continental and Thyssenkrupp, and the country's oldest and largest university, Debrecen has a good deal of international talent and employment opportunities. Several separate initiatives have been available to assist international professionals and students upon their arrival in the city and during their stay. However, support was lacking in some areas. For example, many expats found it difficult to find suitable affordable housing or to understand key city information in Hungarian. The traditional approach to economic development has been about developing infrastructure, not people. Based on a good practice developed by Groningen in the Netherlands, which proposes an integrated approach to internationalisation to ensure a sustainable future for the city, the municipality of Debrecen decided to adapt this to local conditions. To enable city councils to make data-driven decisions, the city's EDC economic development centre conducted a pre-survey to identify international needs. EDC gathered opinions on security, public transport, culture etc. in Debrecen. It showed that representatives of various nations from around the world appreciate peace, green areas and social life, but they lacked centralised information in English, as well as international cultural events. Specific questions for international students also helped to assess the potential future skills of the workforce and how it fits with the growing number of multinationals in the city. It has been confirmed that language is a serious barrier for many international people trying to settle in Debrecen. EDC Debrecen has therefore set out to create an English-language website with practical information on topics ranging from work and housing, to cultural programs. EDC Debrecen has also identified other websites where English versions would be useful, for example in public transport, city works, the Christmas market and other events. The local theatre has, subsequently, started using English subtitles. With time, other foreign languages will be introduced into the city's cultural program. The local partner group has also gathered stakeholders related to the city's investment strategy and others, such as relocation services for foreign residents. This helped Debrecen develop a new drive to change the city's mindset about internationalisation - and played an important role in looking at how they can make life easier for expatriates in their city. Learning from Groningen and the project partner cities at international meetings, EDC Debrecen has developed a locally worthwhile approach to peer learning, while working with interested parties individually on specific questions.

SHARING KNOWLEDGE

Project Making Spending Matter

Preston City Council started to think differently about procurement in 2011 as part of a much larger project to develop a new approach to economic development. The outcome was to remove excessive procurement bureaucracy and make it easier for small businesses to apply for opportunities. The city's spending on purchases now brings maximum benefit to the local economy and residents; in effect responding to social and environmental challenges. "Expense Analysis" is a methodology that Preston City Council and six other load-bearing bodies started using in 2013 to develop the evidence base and to understand where procurement spending is going. Over the past five years, a number of steps have been taken to initiate such a shift. In 2017, the city authorities re-launched the "expenditure analysis" for the financial year 2016/17 to examine, to what extent their influence has changed. The change was significant: the percentage of spending on vendors established in Preston increased from 5% to 18% and the percentage of spending on Lancashire suppliers increased from 39% to 79%. The "expense analysis" process is much more than an analytical tool. It has also enabled the city to collaborate more effectively, to develop a shared vision, to understand Preston's business base and, most importantly, to change its purchasing culture. There are therefore three notions to transfer through Making Spending Matter: - following a methodology in the form of 'expenditure analysis'; - recognising how partnerships and cooperation between the "anchor institutions" are developed; - discerning a way to enable local economic, social and environmental change through the procurement process. Preston, through the URBACT network 'Making Spending Matter', transferred the 'expenditure analysis' methodology to other cities and their 'anchoring bodies'. Koszalin - Poland Kavala - Greece Bistrita - Romania Pamplona - Spain Vila Nova de Famalicao - Portugal Schaerbeek - Belgium all now follow this approach.

PROMOTION AND POPULATION OF GOOD PRACTICES AND EXPERIENCES IN THE FIELD OF SUSTAINABLE DEVELOPMENT

Project HOPE

The City of Helsinki (FI) is tackling air pollution through an innovative approach combining the latest technology with citizen sensors. The UIA-funded HOPE initiative brings together the city, the regional environmental agency

and the university together with the national meteorological institute and private companies to work with citizens in the three main affected areas. One of the innovative aspects that Helsinki tests is involving citizens directly in air quality measurements. Vaisala, a global company from Finland, has developed state-of-the-art air quality sensors that are installed in strategic points of the city, and most importantly, in the buildings of local residents. To complement the fixed sensor readings, handheld devices have also been built that residents can carry with them to provide real-time data.

With such technological innovations, the question inevitably arises as to who owns the data. Helsinki adopts an open data approach by making all readings available on an open data platform. The national body responsible for measuring air quality is included in the partnership to address issues related to validating data generated by citizens. The project aims to develop a new standard air quality index that they hope will become the new standard. Helsinki clearly realizes that technological innovations such as new sensors and handheld devices are just one side of the coin that ultimately aims to drive behavioural change. To fully integrate this approach, Helsinki is considering adding an 'air quality' layer to the existing mobile application for public transport so that users can identify where their modal shift could have a direct impact on air quality.

MONITORING OF SUSTAINABLE DEVELOPMENT GOALS

The Sustainable Development Goals (SDGs) set out in the 2030 Agenda are to contribute to the improvement of the quality of life in all countries of the world thanks to ambitious actions in the social, environmental and economic spheres, i.e. in all three dimensions of sustainable development. The United Nations has set 17 goals and 169 measures to achieve them. In the next step, it was necessary to provide countries and regions with tools to assess whether they met the set requirements and the distance from the set targets.

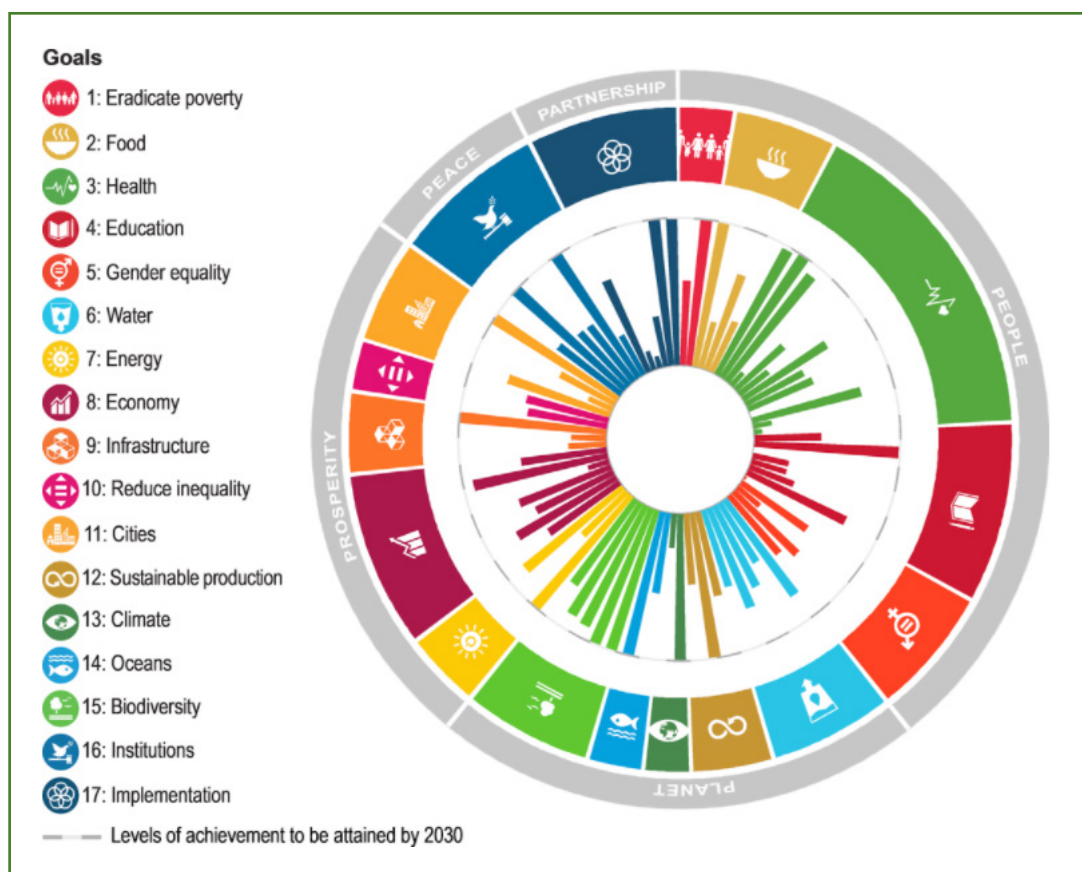


Figure 1. Poland on the way to fulfil the sustainable development goals (2019).
 Source: <https://www.oecd-ilibrary.org/sites/a8caf3fa-en/1/2/2/27/index.html?itemId=/content/publication/a8caf3fa-en&csp=1c51c432b7a7683f5a0142ba189c-0c39&itemIGO=oecd&itemContentType=book> [accessed: 10.12.2021]

The methodology for assessing and visualising its results has been developed by the OECD, which monitors all countries belonging to the organisation and publishes periodic reports.

The sample assessment for 2019 shows in the case of Poland, on the basis of 123 available indicators, covering 98 out of 169 measures of achieving the SDGs, that Poland has achieved the required values of 17 measures for 2030. However, many measures are similar to the assumed ones. The OECD report highlighted hazardous waste compliance, strong GDP growth and high judicial effectiveness, as measured by the very low number of un-convicted prisoners in relation to the overall prison population. The greatest challenge remains the high tobacco consumption rate and relatively low adult participation in lifelong learning.

The cross-sectional assessment shows that Poland is closest to achieving its planetary (goals 14 and 15), energy (goal 7) and poverty eradication (goal 1) goals. Compared to the OECD average, Poland also scores high in the areas of food security (goal 2), gender equality (goal 5), economic growth (goal 8), reducing inequalities (goal 10), responsible production (goal 12) and the institutional dimension (goal 16). Health, climate, infrastructure, cities and partnerships (goals 3, 13, 9, 11 and 17) are far from reaching the recommended values. However, the analyst team found that the results were not so much influenced by low metric values as by a lack of data to assess sustainable production, protect coastal ecosystems, reduce inequality and reduce urban inequalities (goals 12, 14, 10 and 11). Apart from health and infrastructure (goals 3 and 9), for all other goals, there is a lack of data at national level.

Panel A shows an all-country measure of distance to the target, with 0.0 being the recommended level and 3.0 being the baseline. The height of the bars shows the level for Poland, while the diamonds represent the average for OECD countries, and the whiskers show possible variability of the results due to missing data. How much data is missing for each target is shown in Panel B.

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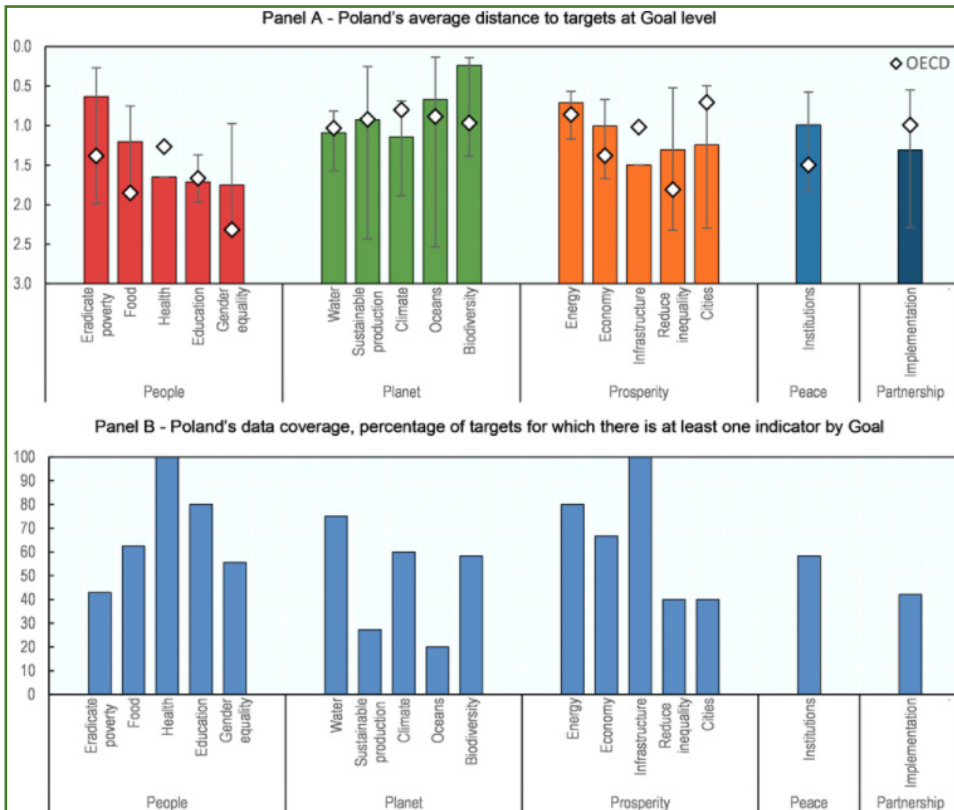


Figure 2. Poland on its way to meet individual sustainable development goals (panel A) and cover individual goals with data (panel B) (2019). Source: https://www.oecd-ilibrary.org/sites/a8caf3fa-en/1/2/2/27/index.html?itemId=/content/publication/a8caf3fa-en&csp_ =1c51c432b7a7683f5a0142ba189c0c39&itemIGO=oecd&itemContentType=book [accessed: 10.12.2021]

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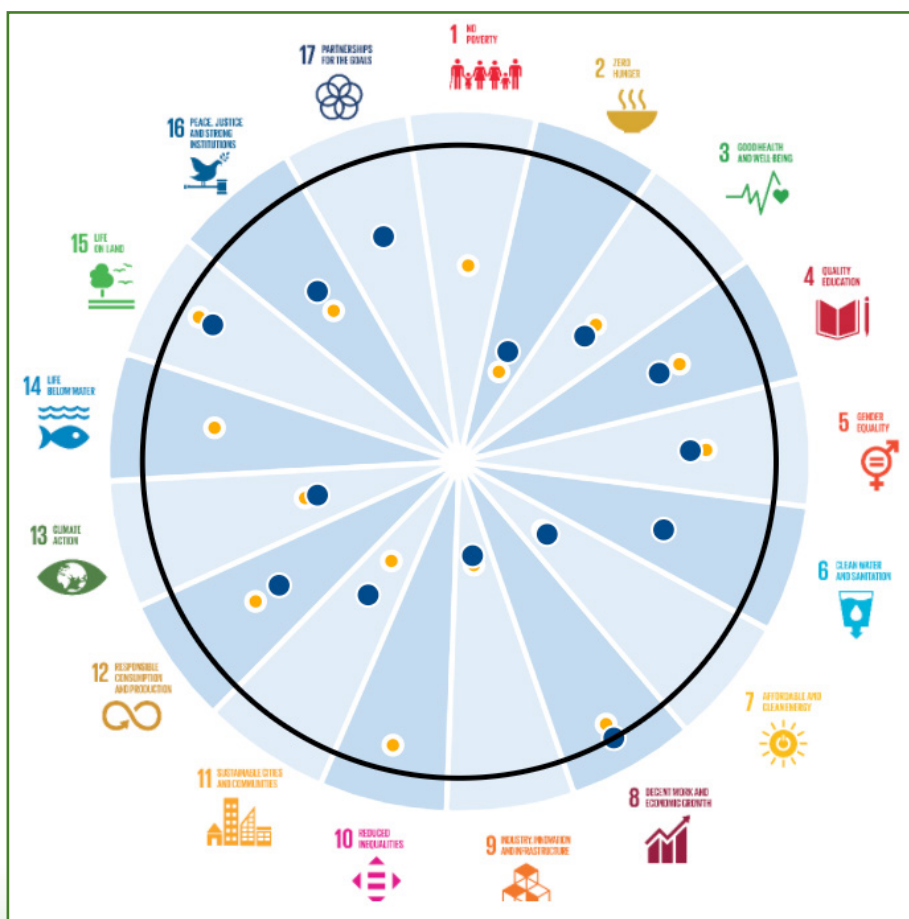


Figure 3. The level of achievement of SDG goals for Greater Poland. Source: <https://www.oecd-local-sdgs.org/index.html> [accessed: 10.12.2021].

Panel A shows an all-country measure of distance to the target, with 0.0 being the recommended level and 3.0 being the baseline. The height of the bars shows the level for Poland, while the diamonds represent the average for OECD countries, and the whiskers show possible variability of the results due to missing data. How much data is missing for each target is shown in Panel B.

Analogue assessments were made for all OECD countries, however, determining them for the national level involves a significant aggregation. OECD is also preparing similar analyses for the regional and local level as part of a pilot program. Detailed studies have been carried out so far for several cities: Bonn (Germany), Kitakyushu (Japan), Kópavogur (Iceland), Moscow (Russia) and several regions or provinces: Córdoba (Argentina), Flanders (Belgium), Paraná (Brazil), Rhine-Neckar (Germany), South Denmark (Denmark), Viken

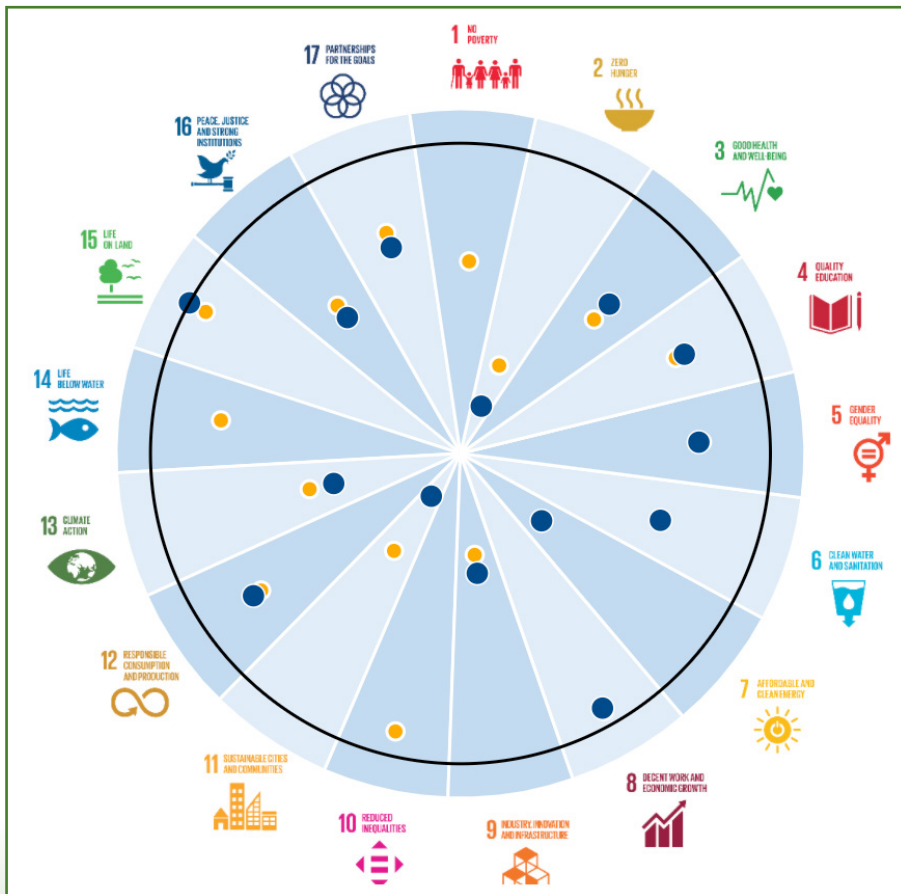


Figure 4. The level of achievement of SDG goals for Lesser Poland. Source: <https://www.oecd-local-sdgs.org/index.html> [accessed: 10.12.2021].

(Norway). In each case, the city or region was characterised in relation to the sustainable development goals as presented in strategic documents. Then, an assessment of the distance from the recommended values was formulated for all measures that could be assessed. In the next stage, the institutional capacity and resources useful for better meeting the objectives, especially stakeholders and partners, were verified. The last part of each report presents its recommendations.

Work on the reports was to be an opportunity for all local governments at the regional, metropolitan and city levels to create a framework for the sustainable development goals to promote social inclusion and improve the quality of life of all citizens. Each time they were slightly different, but there were some elements recurring, including the availability of affordable housing, addressing social inequalities, reducing air pollution and creating the conditions for inclusive economic development. Each time, a multilateral process of social dialogue with stakeholders was undertaken, which led to the establishment of strategic lines of action for the achievement of the SDGs. For example, in Cordoba the following were distinguished:

- building a vision of multidimensional economic development for the provinces,
- reducing the housing supply gap and supporting sustainable construction,
- creating a decent job offer for the most excluded,
- implementing a sustainable water management system,
- deepening the process of coordination and transparency in policy making.

In turn, in Flanders, the emphasis was placed on 7 areas of change: circular economy, intelligent systems that improve the quality of life, industry 4.0, lifelong learning, de-institutionalisation of social assistance for all groups in need of support, transport and mobility, and energy management. In Moscow, the main areas indicated were responsible production and consumption, improvement of air quality and the availability of housing.

Although the OECD has developed only a few pilot reports, the methodology is reproducible and the data itself is available for a much larger group of regions. In terms of regions, selected values can be checked for particular regions in each OECD country, and all for several in each country, including Poland for Greater Poland and Lesser Poland:

The black outline of the graph shows the recommended level, yellow dots - average values for the entire country, and dark blue - for the selected region. In terms of the labour market (objective 8), the level of development of Greater Poland is higher than the domestic and close to the desired level. It is not much worse for Goal 15 (Life on land). As can be seen in the chart above, for

some of the goals, no results were given due to the lack of availability of data, a similarly low level of implementation in others may also be a consequence of the lack of data.

Similar conclusions are provided by the analysis of the chart for Lesser Poland:

In the Małopolskie voivodship similarly the most favourable is the assessment of the objectives 8 and 15, and the worst is 2 (Zero hunger) 11 (Sustainable cities and communities) and 7 (Clean and available energy).

OECD monitoring does not allow for checking the level of achievement of the objectives in relation to any city in Poland. Developing guidelines for Polish cities on what data to collect so that it would be possible to compare the obtained indicators with the goals of sustainable development, would allow improving the implementation of the 2030 Agenda at the local level in Poland.

Recently, an attempt has been made to work out a local development monitoring system in the project “Local development monitoring at the municipal and intra-city level”. The target users of the project’s products are mainly representatives of local governments, who can use them for regular, quick assessment of the situation of their units at a strategic level. The results of such analyses can be used in the preparation of the “Report on the state of the commune” (Art. 28aa of the Polish Act on commune self-government) and constitute the basis for a substantive debate with representatives of the local community about the priorities and directions of development. Aggregated indicators developed in the project are also a significant support for the Ministry of Funds and Regional Policy and regional authorities in the implementation of the Strategy for Responsible Development and the National Urban Policy.

The result of the work of the Team of the Association of Polish Cities and the Institute of Cities and Regions Development is the development of a comprehensive approach to development processes in the commune, within which 12 key areas of sustainable development have been identified:

- Potential of the economy
- The labour market
- The situation of the inhabitants
- The condition of local finances
- Services and infrastructure
- Housing resources
- Social capital
- Security level

- Demographic situation
- Communication accessibility
- Spatial order
- Natural environment

They have been grouped into three dimensions of sustainable development (economic - areas 1 to 6, social - areas 7 to 9, environmental and spatial - areas 10 to 12). Each of the above-mentioned areas has been described through a set of indicators available at the local level in the databases of public statistics - also in the resources of central offices (e.g. data from the Ministry of Finance or the Ministry of Family, Labour and Social Policy), and thus it is possible for this data to be relatively easily linked and aggregated, despite the fact that some before the start of the project were scattered or hidden in the internal databases of diverse data processing institutions.

The collected data was used to create the Local Development Monitor by the ZMP Team - a unique tool on a national scale for assessing the level of development of the commune (<http://www.systemanaliz.pl/monitor-rozwoju-lokalnego>). The developed tool allows for the presentation of the situation of the commune in all 12 areas against the background of selected comparative groups, as well as a “bird’s eye view” of the aggregated assessment in three dimensions of sustainable development. Therefore, the tool can be a valuable support for municipalities in assessing the effectiveness of the implementation of development strategies, especially in the longer period, when it will be possible to observe changes in the relationship of indicators against the background of a selected group. The tool contains data for all communes in Poland from the last 5 years, so it allows not only a snapshot of the current level of the commune’s development, but also to make an initial analysis of development trends.

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